

FAR EASTERN

REVIEW

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LO PAT'S GARDEN

WASHINGTON'S NEXT MOVE IN THE
FAR EAST

READJUSTMENT OF AMERICAN-JAPANESE
RELATIONS

WHAT SHOULD AMERICA DO IN THE
FAR EAST?

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The Far Eastern Review

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FAR EASTERN CROSS-CURRENTS

ADMIRAL Harry E. Yarnell, who holds a high place in the esteem of Americans in China, has seen fit since his recent return to the United States, to issue a series of public statements, advocating, among other things, imposition of an American trade embargo against Japan. These statements stirred the Publishers of the Hearst chain of newspapers to make the following editorial comment:

Admiral Harry E. Yarnell is a splendid naval officer and he has made a fine record handling American naval affairs in the Orient throughout the Sino-Japanese war crisis.

Military and naval men, however—no matter how distinguished—are seldom sagacious statesmen.

So Admiral Yarnell is much less authoritative in civil matters than in naval affairs, and is apparently not even well informed about the international matters he lately discussed.

Returning recently to the American mainland, he told a conference of San Francisco business men:

"They talk of a bloc of Japan-Manchoukuo-China, which implies that China will be placed in the same status as Manchoukuo.

"The future of Americans in China is very dubious. Much depends, of course, upon the actions of our Government.

"If the Japanese prevail I doubt very much if there will be any business for us in China.

"I feel that if we are cut off from our Far East trade it will mean a serious situation for the country at large and the West Coast in particular."

Admiral Yarnell seems in this utterance to be amazingly unfamiliar with the most patent economic conditions.

As a matter of fact, American trade with Manchoukuo has increased enormously since Japan took it over.

If, as Admiral Yarnell says, the future status of China will be the same as that of Manchoukuo, then the effect on American trade will be the same as in Manchoukuo, and the United States should have, and will have, very much more business with China, rather than less.

During the last three years of Japanese occupation the export of American goods to Manchoukuo has been multiplied by more than three times.

The total value of American exports to Manchoukuo in terms of the Manchurian yuan, as reported by the South Manchurian Railway Company, was as follows for that period:

1936	23,735,000
1937	57,523,000
1938	93,070,000

So when Admiral Yarnell says China is going to be placed in the same status as Manchoukuo, with respect to the purchase of American goods, what else does it mean than that the United States can expect to treble its business with China?

Plainly, we are selling many times more goods to Manchoukuo since the Japanese occupation than ever before.

This means more and better markets for American farm and factory products.

It means more and better jobs and wages for American workers.

Of course, this is trade with Japan-controlled Manchoukuo, and if China is ultimately occupied and dominated by Japan, our trade with that country will then be controlled by Japan with similar satisfactory result.

Such is the factual situation with regard to Japanese trade.

Let us be practical, or at least accurate and actual, in considering the situation.

Either trade with Japan and its protectorates is desirable or it is not.

If it is not desirable, why is Admiral Yarnell so worried about his misconception of what will happen to the West Coast through the possible loss of it?

And if it is desirable, and it obviously is, why is the New Deal Administration in Washington going to such lengths to lose the American Trade With Japan by alienating Japan's friendship and erecting so many obstacles to mutually good commercial relations and friendly sentiments?

The thing that is really interfering with the United States' trade with the Orient is not Japan and Japanese control of China but the amazing attitude of the United States Government in supporting British interests in the Orient to the detriment of the interests of our own people.



THE Secretary of State, Mr. Cordell Hull, yesterday indicated that the State Department regarded the status of the Japanese embargo question as such that action could be taken on the issue by the Senate Foreign Relations Committee easily on short notice.

In response to questions regarding the status of the embargo, Mr. Hull told the press he had heard from the Senate that the embargo question was on a week-to-week basis—meaning consideration may be given it at any time, depending on developments within the week previous. The expression was also significant because the Senate Foreign Relations Committee normally convenes weekly to consider pending business.

Mr. Hull evaded the question of whether he would personally consult the committee in the near future in connection with the embargo question.

The Secretary of State's reply regarding the weekly basis of the embargo question confirmed the impression, which impartial, informed sources obtained recently, that the State Department does not wish the immediate consideration of pending embargo proposals but prefers them to rest before the committee where action can be taken on them at any time.

The department's policy in this respect was believed based on the desire to avoid precipitous action, which might shock Japan into some notable effort to retaliate. Instead, Mr. Hull's policy was apparently a cautious, progressive influence upon Japan, of which, at present, the most active form was the proposed China loan.

One observer expressed the opinion that Mr. Hull did not wish to obtain embargo powers immediately, because he might not be able logically to resist the public clamor for more drastic application of such powers once they were vested in the President and the State Department. While the matter rests with Congress there is a divided responsibility, and pressure for action is somewhat reduced.

This source said the Senate Foreign Relations Committee would follow Mr. Hull's wishes regarding the passage of an embargo, although private committee polls thus far indicated there was no certainty regarding its passage. The uncertainty arose because one or two more committeemen were opposed to an embargo than favored it, but a substantial number remained non-committal. This source said the non-committal votes would largely support Mr. Hull if he asked for an embargo.

THE U.S. \$20,000,000 American loan to the Chungking Government announced at Washington is an "unfriendly act which is highly undesirable," Mr. Yakichiro Suma, Foreign Office spokesman told the press.

Mr. Suma said he disliked it particularly because it occurred on the eve of the establishment of the new central "government" of Mr. Wang Ching-wei, leader of the rump "Kuomintang." Mr. Suma said he did not oppose the legal right of the United States to lend money but said the loan "means assistance to the warring Government of Chungking."

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NEW YORK, February 21.—The failure of the Senate foreign relations committee to discuss any of the anti-Japanese embargo proposals has led to the belief that the committee eventually expects to bury all such proposals, the Washington correspondent of the *New York Herald Tribune* reports.

One Senate leader indicated clearly that the State Department already is engaged in preliminary conversations with Japan for a new trade pact, while another Senator, hinting similarly, declared that the anti-Japanese proposals need not be worried about for the present. However, the Senator gave no reasons, the correspondent says.

It is believed in well-informed Congressional circles that nothing will be done for the present about the Japanese situation barring further "incidents" or radical changes.

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THE *Japan Times*, semi-official English newspaper, pointed out that Great Britain's activities in assisting Chinese resistance abated with the outbreak of war in Europe. But, the newspaper said, the Japanese people were "uneasy" over the strengthening of the American navy "on a two-Power basis whose purposes cannot be purely defensive."

"The Japanese people, charged with the protection of their country, cannot fail to view with concern such activities and preparations," the *Japan Times* continued. "The general belief is that although the embargo is delayed, although the voting of funds does not mean forthwith the release of money to Chiang Kai-shek, and although the enlarged American navy is not an immediate threat, the three combined form too obvious evidence of American unfriendliness, which some immediate official change at Washington should nullify in furtherance of President Roosevelt's policy of world amity."

"On this point the Japanese people still seem to have faith in the sanity of the American mind."

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A SURVEY conducted by the United Press among members of the Senate foreign relations committee shows increasingly strong feeling against the imposition of an economic embargo against Japan, with indications that the committee may pigeonhole any such proposals.

Out of 23 members of the committee, 12, including Senator Tom Connally, Texas Democrat, are opposed to the anti-Japanese measure, while seven, including Senator Key Pittman, chairman of the committee, favor legislation and four, including Senator Arthur Vandenberg, Michigan Republican, remain undecided on the question.

The United Press learns from reliable quarters that the majority of the committee believes that Japan should be given time to demonstrate whether it will cease violating American rights in China. In the meantime, they would have the United States help China by granting new loans.

Senator Sherman Minton, Indiana Democrat, predicts, as does Senator Lewis B. Schwellenbach, Washington Democrat, that the embargo bills against Japan will be enacted "with a very safe margin." Three others of the anti-embargo bloc, Senator E. D. Thomas, Senator R. D. Holt and Senator Frederick Van Nuys, Democrats respectively of Utah, West Virginia and Indiana, agree that "the embargo would be not only ineffective but dangerous and might drive Japan into Russia's arms."

Several pro-Administration committeemen, who decline to be quoted, say it is unnecessary to have any special legislation to impose an economic embargo against Japan, for the President already has sufficient power to apply strong economic pressure whenever he feels it necessary.

THAT the policy of the United States towards Japan continues to be "most unpleasant," is asserted in an article, in the *Asahi Shimbun*.

The paper cites two instances in support of this contention: that the United States Government has approved a loan of \$20,000,000 to China, and that Mr. Cordell Hull, Secretary of State, in approaching 55 countries regarding the rebuilding of the world after the war, did not approach Japan.

"A far more important issue in this connection," the *Asahi* continues, "is the fact that the United States Government intends to deny the forthcoming establishment of the new Central Government in China, and a section of American opinion takes the stand that if such a régime is established, the United States should take the lead in calling a Nine Power conference for the purpose of taking positive action to deny the new conditions."

In pointing out that Britain and France might be expected to support the United States in such an event, the newspaper urges that Japan should closely watch the future attitude and action of the United States, while maintaining calm.

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THE Import-Export Bank on March 8 allocated U.S. \$20,000,000 for an additional loan to China, Mr. Jesse Jones, Chairman of the Reconstruction Finance Corporation, announced.

The loan was made possible by the U.S. \$100,000,000 increase in the bank's funds approved recently by Congress.

The loan brings to U.S. \$45,000,000 the total United States advance to China since the Japanese invasion.

Mr. K. P. Chen, head of the Chinese Purchasing and Financial Mission to the U.S. said, "The credit will be employed by China through the Universal Trading Corporation for the purchase of metals, oils, trucks, road building machinery, mining and smelting machinery, medical supplies and other materials needed for reconstruction work."

"Through the Universal Corporation China will continue to bring in tung oil, tin and other materials to supply the needs of American industries."

Dr. Hu Shih, Chinese Ambassador to Washington, said, "We are gratified for this timely financial aid by the American Government."

Mr. Jones announced that the bank also made allocations of U.S. \$100,000,000 to Denmark and U.S. \$1,000,000 to Iceland for the purchase of non-military supplies in the United States.

A loan of U.S. \$20,000,000 to Finland has already been approved.

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"GRANTING by the United States of a loan of U.S. \$20,000,000 to China, on the eve of the establishment of a new régime under Wang Ching-wei, is as important as if one million United States' soldiers were fighting in China on China's side," declared the *Central Daily News*, official organ of the Chinese Government, in a leading article.

The significance of the loan, the newspaper stated, was far beyond that of ordinary international loans.

The Import-Export Bank, it said, already extended a loan of U.S. \$25,000,000 to China. Regulations prevented further loans, therefore the United States' Government took the trouble to pass new legislation to make the new loan possible.

After the expiry of the American-Japanese Treaty of Commerce and Navigation, the *Central Daily News* continued, the United States not only did not renew the pact, but took no steps to negotiate a new treaty.

"The new loan, approved by the President, the public and Congress, without distinction of parties, shows the unanimous sympathy on the part of the United States towards China. It should be a serious warning to Japan, coming as it does, on the eve of the establishment of a new régime under Wang Ching-wei. If Japan fails to change her policy in China, she may see further 'unfriendly and unpleasant' action on the part of Third Powers."

The value of moral encouragement by the new loan is even greater than its material value. "From the Chinese point of view, it is just as important as if one million American troops were fighting in China on China's side."

"Such sympathy and friendship on the part of the United States gives China greater confidence in her ultimate victory," the *Central Daily News* concludes.

JAPAN faces a serious situation because of "fantastic logic" on the part of Government officials who have lost contact with the people according to the *Nichi Nichi* newspaper.

The paper asserted that control measures are enforced haphazardly and that "present day politics are filled with too many contradictions." What is needed, the paper said, is closer harmony between the people and the lawmakers.

"If the present situation continues unchanged," the *Nichi Nichi* said, "conditions will become worse than ever before in history."

The paper recalled the recent suggestion in the Diet that dogs and cats be exterminated in order to increase the amount of food available for human consumption. Such a proposal brings home a realization of the acuteness of the situation, it says.

"Whenever we meet together we naturally ask if there is enough rice and charcoal even before inquiring about each others' health," the *Nichi Nichi* said, adding that the people are able and willing to face even greater hardships but question the Government's failure to keep in touch with affairs on the home front.



THE United States has sacrificed its right and qualifications as a possible mediator in the Sino-Japanese war because of the new \$20,000,000 American loan to China and Washington's refusal to sign a new trade agreement with Japan, the *Kokumin Shimbun* said in a recent article.

The paper said that Japan's answer to American mediation offers was quite simple, namely, "Japan's policy *via-à-vis* American moves is exactly in line with the German and Italian policies."

Germany and Italy, it was recalled, have recently declared the United States ineligible as mediator in Europe because of alleged American sympathy with the Democratic Powers.

The Japanese press in general to-day labelled the European tour of the American Under-Secretary of State, Mr. Sumner Welles, a failure. The *Asahi Shimbun* pointed out that there is no chance of reconciling the present war aims of the Allies and Germany.

The *Kokumin Shimbun* said Welles might discuss the Far Eastern situation with British authorities during his visit to London and attached great significance to this possibility. The paper reiterated, however, that America could not qualify as mediator in the Far East.



THE new American loan of U.S. \$20,000,000 to China is intended to promote American foreign trade, Mr. Cordell Hull, Secretary of State, told the press.

Mr. Hull said the nation's trade policy provided for loans to certain countries through the semi-official Export-Import Bank.

The Secretary declined to make any further comment on the American loan when requested to reply to the Japanese Foreign Office statement that the loan was an "unfriendly gesture" toward Japan.

An initial loan of \$25,000,000 was extended to China in December 1938. Recent official statements disclosed that China is ahead of schedule in repaying the initial loan.

Chinese quarters at Washington said that the new loan would be used for the purchase of American metals, oils, trucks, road building machinery, mining and smelting machinery, medical supplies and other materials required for reconstruction work.

The United Council for Civilian Relief in China has raised an additional \$500,000 which will be spent on medical supplies which will be shipped to China.

Mr. K. P. Chen, head of the Chinese Purchasing and Financial Mission to the United States said that through the Universal Trading Corporation China will continue to export to America tung oil, tin and other materials required by American industry. Repayment of the American loan will be made through these exports.

The Universal Trading Corporation also will handle Chinese purchases in the United States made possible by the new \$20,000,000 loan.

The new loan was made possible by Congressional appropriation of \$100,000,000 for Export-Import Bank loans. Congress also revised the former foreign loan law which limited loans to any single Government to \$30,000,000.

Informed quarters here reported that China is seeking eventual additional loans from the United States aggregating at least \$55,000,000 which would bring total American wartime loans to China to \$100,000,000.

THE Foreign Minister, Mr. Hachiro Arita, was asked in the Lower House whether the Foreign Office would bow before the will of the United States in connection with the present treatyless situation between Japan and the United States.

In reply, the Foreign Minister said: "Japan has nothing to fear even if the United States should oppose, *in toto*, the construction of a New Order in East Asia, failing utterly to understand Japan's aims in China, or even if the United States should insist that their view on the matter should be accepted."

"But things have not come to such a pass," Mr. Arita added. He reiterated that he had no thought whatever of pursuing such a makeshift policy as negotiating a *modus vivendi* to the Japanese-American trade pact on condition that the Yangtze is reopened to traffic.

The latter or any other pending issue, he continued, would be settled properly, from an independent Japanese standpoint.

"I do not know for certain what the United States Government is thinking," Mr. Arita declared, "but if its rock-bottom intention is that the Japanese goal and holy war shall be repudiated, that nothing shall be done to regulate Japanese-American relations unless the Japanese goal is withdrawn, Japan would show a firm attitude regarding the policy to which she is committed."



STRONG criticism against the "flirtations" and "hesitations" of the present Japanese foreign policy is voiced in an article published by the *Chuo Koron* monthly under the signature of the well-known editorial writer of the Tokyo *Asahi*, Shiro Machida.

Mr. Machida first directs his attacks against those who have come lately to "flirt" with the Soviet Union and advocate a regrouping of Powers by which a new association would be constituted between the old anti-Comintern group and its former arch-enemy, the Soviet Union. Such a policy, he says, could be inspired only "by a desire to follow the German policy of expediency, and would not only contribute in no way towards the settlement of the China war but would point to a direction entirely opposite to the path of the Japanese policy."

Mr. Machida further cautions his country in strong terms against the fallacious policy of using Russia as a means to throw Britain out of Asia, "for it is only too obvious that in the event of Britain retreating merely a step from the East, Russia would step in and take her place." The conclusion of a non-aggression pact between Tokyo and Moscow can at best cover momentary exigencies, the writer claims, but if anyone thinks this will break the British hold on China, "he might share the fate of those who fall into the pit dug for others."

It is hard to understand, even at this time, how Germany came to sign her non-aggression pact with the Soviet Union, Mr. Machida says, and it can only be attributed to "the Machiavellian unscrupulousness of Nazi policy." But as for Japan, the writer frankly confesses that he has been puzzled by the attitude of the Foreign Minister, Mr. Arita, who defended the existence of the anti-Comintern pact with Germany and Italy, when he spoke before the Diet, using many circumlocutions in that respect.

"Why has not Japan declared its unflinching attitude toward the German action?" asks Mr. Machida. "We can never accept any argument that might give the impression that Japan seeks to justify her actions in defending Germany's violations of pledges and treaties."

So far for the Soviet Union and Germany. But Mr. Machida has a second warning to deliver to the leaders of his country. It is to beware of the mistake of considering the United States separately from Great Britain.

"It is a fool's dream to believe that in case of an Anglo-Japanese war the United States would maintain an attitude of friendly neutrality towards Japan," Mr. Machida writes. "Britain and the United States are one and indivisible. We must be fully prepared for a war with the United States once we are engaged in a war against Britain. If anyone thinks that in the event of Japan fighting Britain and the United States together, the Soviet Union, Germany or Italy would come to Japan's aid, we must doubt his intelligence."

This unity of policy exists in time of peace as well, the writer believes. "Britain will never feel it necessary to concede to Japan at the cost of incurring the displeasure of the United States. The limit to which Britain will concede is the limit to which the United States will approve."

BEFORE leaving for Nanking to attend the Central Political Conference at which important affairs regarding the impending establishment of a new central government in Nanking were to be discussed, Mr. Wang Ching-wei, who is going to head the new régime, issued a manifesto in Shanghai through the China News Agency explaining his stand to the nation.

In his statement, Mr. Wang emphasizes the co-operation with Japan advocated by Dr. Sun Yat-sen as the keynote of his policy, reiterating the statements made by Prince Konoye of Japan. He assures that the peace movement led by him will not impair the independence of China and expresses the hope that within the shortest possible time, the period of political tutelage will be brought to an end and the period of constitutional government, inaugurated.

"For the past few months, sincere discussions with Japanese both in and outside the Government have been held on the basis of the principles of 'good neighborliness,' a 'common anti-Comintern front' and 'economic co-operation' in the hope that these principles will be realized and both parties benefited. Earnest discussions have also been held with the existing Administrations, with other political parties and with non-Party national leaders with a view to devising ways and means of saving the situation by determined and united efforts. Hence the organization of the Central Political Conference which will give birth to the Central Government," Mr. Wang says.

He promises that this Central Government will externally readjust foreign relations and internally enforce constitutional government, and by eradicating all the causes of the conflicts and disputes of past years, inaugurate a new era of peace and national well-being.

"In view of the unanimous agreement to organize the Central Political Conference which is to be held shortly, I hereby call upon the nation to comprehend the real significance of the Peace Movement and the Peace Scheme." Mr. Wang mentions the fruitless resistance against the Japanese which, he says, has caused the death of millions of people, and concludes with an appeal that Chungking will stop hostilities and co-operate with him in re-establishing peace.



INFORMED Washington Government officials, says the *United Press* privately doubt the likelihood of an extensive Russo-Japanese rapprochement, in spite of the comment of the Japanese Foreign Office regarding a settlement of Russo-Japanese controversies.

Observers stated that the Japanese statement was intended to influence the United States and Britain toward closer collaboration with Japan by the threat of collaboration with the Soviet.

It was believed that Japan was making an effort to use the threat to obtain recognition from the United States of Japan's conquests in China, forestall an anti-Japanese embargo and start negotiations for a new commercial trade pact.

Tokyo hopes that the threat of a Russian rapprochement will tend to make the British more willing to make concessions to Japan, it was said.

Officials said private reports from China showed that Generalissimo Chiang Kai-shek was still receiving extensive aid from the Soviet and there were no indications that the Soviet would abandon such assistance—certainly, they believed, the only condition under which Japan would enter a fundamental rapprochement with the Soviet.

It was pointed out that Russo-Japanese differences are not only ideological but also are historical and geographical. The conclusion of a trade pact is not impossible, it was said, but it would not involve the cessation of Russian aid to Chungking or any major Soviet concessions to Japan.

Officials emphasized that the points the Japanese Foreign Office cited as demonstrating improved Russo-Japanese relations were only minor. The statement, they said, did not touch fundamental questions. The only eventuality which would force Russia into some sort of an alliance with Japan would be a Russo-Allied war, they said, when the Soviets would be anxious to neutralize Japan.

The Japanese Foreign Office statement issued at Tokyo reported that "considerable progress" had been made toward the settlement of all Russo-Japanese problems. The spokesman for the Foreign Office stated that there had been an improvement in negotiations on the Manchoukuo boundary, fisheries, oil and coal problems. Negotiations on these problems are still in progress.

The spokesman said that "there is a general improvement in relations, although it must be emphasized that at present definite and concrete results have not been obtained."

SOVIET assistance to Chungking will increase when the Finnish campaign ends, Gen. Yang Chieh, Chinese Ambassador to Moscow, predicted in Kunming. Gen. Yang, who returned to Chungking from Moscow early in March in great secrecy, made his first public statement in Kunming.

The Chinese militarist turned diplomat, said he believed that a settlement of the European conflict was considered difficult in Moscow, although various nations appreciated the idealistic motives behind American peace overtures.

Gen. Yang declined to divulge the character of his activities in Moscow, which, he was quoted as saying, "must remain secret."

Soviet Government circles, he was further quoted as saying, regarded Mr. Wang Ching-wei as being of a "vacillating" character and were of the opinion that there could be no Soviet-Japanese rapprochement at present.



JAPAN will extend recognition and support to the National Government of China soon to be re-established in Nanking with Mr. Wang Ching-wei as its central figure, Admiral Mitsumasa Yonai, the Premier, declared in the Lower House after the unanimous adoption with acclamation by the House of Representatives of a resolution pledging its full support toward the attainment of the objective of the present China campaign.

Japan's immutable policy in the present conflict, the Prime Minister declared, was to establish a new order which would ensure the lasting stability of conditions in East Asia and would thereby contribute to world peace. This aim, he added, was in harmony with the fundamental ideal of the establishment of the Japanese Empire.

With this end in view, Admiral Yonai continued, Japan was continuing its endeavors to bring to extinction the anti-Japanese and pro-Communist régime in China. The realization of friendly, neighborly, relations between Japan, Manchoukuo and China, together with joint defence against the Communist menace and economic co-operation was being sought, he stated.

Japan, the Premier went on, was also striving to build a firm foundation for stability and friendly intercourse in East Asia by realizing closer political, economic, and cultural relations among those three Powers.

Japan's national strength, Admiral Yonai pointed out, had been fully demonstrated by the successful increase in the country's productivity in spite of the large-scale warfare being conducted in China.



INSISTENT arguments that projected improvements in harbor facilities at Guam Island might disturb Japanese-American relations persuaded the House of Representatives to delete funds for the work from the regular naval appropriations bill, very much as was done last year when the same issue came up.

The measure requested Congress to appropriate \$3,000,000 for harbor improvements and an extension of seaplane facilities at Guam. It was defeated by only nine votes, the roll call showing 123 representatives against the project and 114 supporting it.

A similar measure, asking \$5,000,000 for harbor dredging and the construction of seaplane ramps at Guam over a period of three years, was stricken out of this year's naval budget last February 23 with the adoption of an amendment to that effect by a vote of 205 to 168.

United States foreign policy, centering on Japan, likewise entered into three days of intensive debate on the relatively minor project last year. Proponents of the work maintained that it was more commercial than military in nature, but opponents prevailed with the contention that it would irritate Japanese naval and public opinion.

A subsequent attempt to have the item restored in the Senate also failed. A still later suggestion that the work be provided in a supplementary appropriation for the Interior Department under rivers and harbors never materialized.

During debate in the Lower House on the \$3,000,000 project, Representative James P. Richards charged that the proposal was the first step toward the establishment of a "Gibraltar in the Pacific," which he said eventually would cost \$100,000,000 to complete.

He also coupled the Guam project with an alleged movement to repeal the Tydings-McDuffie Act providing for Philippine independence.

THE establishment of peace in East Asia and thus salvation of China were the teachings of the late Dr. Sun Yat-sen, father of the Chinese Republic, and it was the mission of those who sincerely loved China to carry on his will, Mr. Wang Ching-wei, who will head the projected new central government of China emphasized in a statement issued the 15th anniversary of the death of Dr. Sun Yat-sen.

"Assistance in establishing an independent and free China and reconstruction of East Asia" declared by Japan were not "sugar-coated poison" as branded by some Chinese, Mr. Wang stated.

"Japan is a senior nation of East Asia, and without it, there is no East Asia," he continued. "At the same time, judging from China's position as a nation and its racial significance, it can be said that without China, there is no East Asia."

"It is an immortal truth that Japan and China, when they are at peace, enjoy mutual prosperity, but if they were at war, both suffer defeat and ill-effects. It is not trickery to advocate this during peace, and again advance it during wartime. We hold ourselves responsible for the realization of this idea with sincerity and courage because we believe in it as a truth."



THE establishment of a new government of China under the leadership of Mr. Wang Ching-wei would be regarded by the United States Government as a clear violation of provisions of the Nine-Power treaty, it was reported by Mr. Hobart C. Montee, United Press correspondent assigned to the State Department.

Mr. Montee said he had learned that the Government also would consider the establishment of a new Chinese régime an infringement on American rights and interests in China.

These views were understood to have been conveyed to the Italian Government, which recently expressed open sympathy for the effort to set up a new central government in China to oppose the National Government at Chungking headed by General Chiang Kai-shek.

Mr. William Phillips, the United States Ambassador in Rome, was said to have informed the Italian Foreign Minister, Count Galeazzo Ciano, of the American Government's attitude soon after an exchange of mutual goodwill messages between Count Ciano and Mr. Wang, in which the Italian Foreign Minister extended best wishes for the success of Mr. Wang's political endeavors.

Even if Japan denounced the Nine-Power treaty, Mr. Montee said officials had told him, it would not affect the situation basically, as the other signatories would remain partners in the agreement.



A THINLY-VEILED threat to nationals of third Powers who failed to recognize the new central government which will be established in Nanking was uttered by the Japanese Embassy spokesman in Shanghai when he said that the obvious result of the Powers' ignoring the new administration will be that nationals of those Powers in the areas under the jurisdiction of the new government will be the ones to suffer difficulty in trade movement and so forth.

Commenting on the impending establishment of the new "National Government of China" in Nanking, the spokesman said that dispatches from abroad indicated that some Powers were likely to ignore the new administration. He expressed grave doubts that those Powers would be able to ignore the new government, as indicated, because should it be necessary to negotiate with Chinese authorities over matters involving residents of third Powers within the areas under the jurisdiction of the new administration nothing could be accomplished by taking the matter up with Chungking.

Quoting conditions in Manchoukuo to-day as an example, he said that in 1932 the League of Nations passed a resolution advocating non-recognition of Manchoukuo. Representatives of various Powers in Manchoukuo, however, do enter into direct negotiations with the government there, and while they may not actually recognize the government, they are in direct contact with the authorities. If the interests of third Powers in Manchoukuo are to be compared with those in the areas which will be under the control of the new national government, he said, the latter interests were much greater and it was beyond question that Powers would ignore the new administration.

It also seemed to the spokesman that the reason for reports of decisions to ignore the new government was more a matter of sentiment which sprang from a feeling of sympathy for the Chungking Government, but in reality, he stressed, sentiment has to give way to facts and politics do not permit sentiment to overshadow real interests.

THE BRITISH Minister of War Economy, Mr. Ronald H. Cross, has announced that the establishment of a contraband control port in the Far East was under consideration.

Mr. Cross told the House of Commons the base would be for the purpose of blocking American exports to Russia by way of Vladivostok for German use.

Replying to a question regarding Russia's increased imports by way of Vladivostok, Mr. Cross said, "The whole subject of contraband control is under constant consideration." He added specially the Far East.



JAPANESE authorities in China, including the military, were taking "proper measures" to control alleged espionage by foreign missionaries there, Mr. Hachiro Arita, Foreign Minister, said in the Lower House in replying to an interpellation.

The Japanese consular police were also co-operating, he said.

Declaring that the Japanese Government welcomed evangelical work by Japanese in China, Mr. Arita said he hoped that Japanese Buddhist priests would be given the same rights as other foreign missionaries to engage in mission work in China, with temples as their base of activities, when a new treaty was concluded between Japan and the reorganized National Government under Mr. Wang Ching-wei.

Mr. Tomomasa Kato, a member of the Reformist faction of the Seiyukai, urged upon the Government to give Japanese religious workers the opportunity to be active in China for the promotion of co-operation between the two countries.



JAPAN was ready to renounce her extraterritorial rights in China, Mr. Hachiro Arita, Minister of Foreign Affairs, declared before a budgetary committee in the Lower House.

The Cabinet, he said, was pursuing a policy for that purpose. "It must be added, to preclude a possibility of misunderstanding, that the abolition of the system of extraterritoriality requires due preparation," he remarked.

He said it would be "impossible" to abolish the system of extraterritoriality on the same day or immediately after the projected new Central Government of China is established.

The Foreign Minister declared that there had been no change in the Government's policy to renounce extraterritoriality in China "as soon as possible in keeping with the actual conditions."

Mr. Arita recalled that this policy had been enunciated by Baron Kiichiro Hiranuma during his tenure of office as Premier from January 5 to August 25 last year.



BRITAIN should recognize the new "Central Government" in China when it is established because it will comprise all the attributes Britain has demanded that the Chinese Government have, the *Japan Times* said in an editorial.

The newspaper outlined six points which Britain should recognize in order to ameliorate the situation in the Orient.

Firstly, the newspaper said, Britain should recognize the imminent realization of the establishment of the new "Government" under the leadership of Mr. Wang Ching-wei, head of the rump "Kuomintang."

Secondly, the new "Government" will be supported by a substantial group of Chinese, who must be taken as the representatives of the Chinese people in the absence of a ballot.

Thirdly, Japan will not retract its full support of the proposed "Government" and not relinquish its position as "military protector" of China during the new "Government's" formative years.

Fourthly, Britain should recognize that Generalissimo Chiang Kai-shek cannot change the course of events and will probably not receive any more outside assistance than he has been getting.

Fifthly, Britain should realize that Japan is determined to recognize the new "Government" after its establishment, despite all opposition, no matter how strong.

The newspaper said it could see no reason for disagreement between Britain and Japan, as Japan's policy toward China is parallel with Britain's.

"Wang Ching-wei," the newspaper said, "... has at least as much authority to represent the people as other regional régimes have possessed since the Boxer rebellion. . . ."

THE Japanese army must guide the projected Wang Ching-wei régime of China in military, political and economic affairs for some time after its final organization, Lieutenant-General Heisuke Yanagawa, director-general of the China Affairs Board, told a meeting of the third sub-committee of the House of Representatives budget committee.

Lieutenant-General Yanagawa said Japanese guidance would be necessitated by the continuation of hostilities in China. The army, he said, intends to help the projected new government to attain a position from which it may exercise its own political power at the earliest possible date.

The statements were made in reply to questions by Mr. Chozaburo Mizutani, of the Social Mass Party.

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CHINESE armies had suffered losses estimated at 3,000,000 men in the conflict which exploded over the length and breadth of China from the spark touched off in the initial trivial clash at the Marco Polo Bridge on the outskirts of Peiping two and a half years ago, Gen. Shunroku Hata, War Minister, told the Diet.

In his speech reviewing the war situation Gen. Hata said that to date Japanese forces had occupied Chinese territory two and a half times as large as the Japanese Empire.

Now the fighting power of Chinese armies was reduced to a level only one-fourth of what it had been in the first stage of hostilities, the War Minister declared.

Scanning operations during the past year Gen. Hata pointed out that Chinese forces had launched three offensives—in April, July and September, “apparently prompted by a desire to invigorate their morale and also to demonstrate to pro-Chiang Kai-shek foreign Powers that the Kuomintang armies still possessed fighting power.”

But those offensives, which failed to emerge from a stage of large scale guerilla warfare, collapsed on all fronts, the War Minister stated.

Following those three abortive drives, the Chinese armies attempted a so-called winter offensive in December.

This shared the fate of the April, July and September “pushes,” according to Gen. Hata, who asserted that the latest Chinese attacks were being broken on all fronts, though sporadic activities still were maintained by the Chinese in some sectors.

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A CLOSER understanding between the Central Government and Chinese Communists, and also the removal of incidental friction between local military and Communist authorities in the north-west provinces of China may be expected, Reuter reports from Chungking, following the progress of negotiations between the Central Government and the Communists over several outstanding issues, according to Chinese circles here.

An agreement shortly to be signed between these two authorities is persistently reported.

One of the main issues discussed, it is stated, concerns the size of the Chinese Communist army.

After the Sian incident, the Chinese Communist army was incorporated into the Chinese Central Government army, to be known as the Eighth Route Army, with a total strength of one army corps.

Following the outbreak of the Sino-Japanese hostilities, the Eighth Route Army is said to have recruited many irregulars, who were only poorly equipped. Later, it became necessary to regulate their organization.

It is understood that after considerable discussion, it was finally decided to fix the strength of the Chinese Communist army at six divisions.

According to the agreement reached after the Sian incident, the Central Government is reported regularly to have given the Chinese Communists funds for the maintenance of one army corps.

Since the reorganization of the Eighth Route Army, however, it is believed that the Central Government agreed to increase the allowance to enable six divisions to be maintained, on the condition that the Communists would observe the rules and regulations of the Central Government regarding organization, discipline and other matters.

In return, it is stated that the Communists would not be permitted to increase their strength, nor organize “allied forces.”

Another major issue which awaits settlement concerns the territory under Chinese Communist administration.

At the time of the Sian incident, Chinese Communists were said actually to be in control of only three hsien in northern Shensi, but after the outbreak of hostilities, the area occupied by the Communists was known to have been extended.

An order to facilitate military operations of the Central Government agreed to allot certain districts in northern Shensi to Communists, but at the same time, it is learned that the Communists have agreed not to extend their activities beyond the areas now occupied.—Reuter.

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UNABLE to import from Germany four dynamos needed for a hydro-electric project, because of the outbreak of the European war, the Manchoukuo Government will place orders for the machinery in the United States and in Japan, it was learned.

The machinery will be installed at the projected Shuifengtung power plant on the Yalu River on the Korean border.

Instead of the three dynamos originally ordered in Japan, the Manchoukuo Government has placed orders for five with the Shibaura Engineering Works in Tokyo, while the purchase of two 100,000 kilowatt generators in the United States is being planned. Four of these generators were to have been purchased in Germany.

With increasing demands for electric power by Manchoukuo industrial enterprises, the completion of the Shuifengtung plant on the Yalu and the Sungari River project has become urgent. The three generators, originally ordered in Japan, will be completed in September, while the American machinery is expected to be installed by the end of 1941.

Meantime, one of three 70,000-kilowatt generators ordered by the Manchuria Electric Corporation for its Sungari project left San Francisco in the middle of January, while the remaining two are to be shipped by the end of June.

In addition to the three generators from the United States, the corporation has ordered three generators of the same capacity from Germany and two from Japan. This German machinery was expected to be delivered in spite of the war.

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IN view of the existing situation in both Japan and Manchoukuo, the Manchoukuo Government during the present year will go a step forward in carrying out its commodity mobilization program and will devote its energies mainly to expanding the output of iron, coal, and electric power, as well improving its transportations facilities.

The Manchoukuo Government's objectives this year may be summarized as follows:

(1) Coal Mining. A total output of 24,000,000 to 25,000,000 tons of coal is expected to be extracted from the country's various mines, an increase of 25 per cent over the past year's output. Of this figure, it is planned to have 11,000,000 tons produced by the Manchuria Coal Company, which company is expected to bear the brunt of increasing the coal production. The figure above is to be taken as the basis in determining the supply of coal to be distributed to consumers, including those in Japan.

(2) Iron Mining. The fifth and sixth expansion program of the Showa Steel Manufacturing Company will be carried out at all costs this year by supplying the necessary coal to all its iron foundries. Because the shortage of coal hampered the increased production of iron last year, the necessary supply will be obtained not only from the Penhsihu, Mishan, and other coal mines in eastern Manchuria, but also from North China through large-scale importation.

(3) Electric Power. Because of the difficulty of importing the necessary equipment from Germany, a shortage of electric power is seen likely to occur. The Manchoukuo Government will try to forestall this by taking into account the present capacity for power generation in Manchoukuo and the country's coal output and revising the commodity mobilization plan so as to meet the situation. In eliminating the various factors which hamper the expansion of electric power generation, Manchoukuo is expected to take appropriate and effective steps for the replenishment of electrical equipment by purchasing machines from Japan instead of Germany. Imports of machinery from Germany are thought to be hopeless in view of the difficulties of transportation.



Only when the hot water is shut off
Or the toast is cold
Do some people realize that
War must be Hell.



Many who in ease and luxury
Suffer poor health
Are restored to vigor
After losing their fortune.



Only through calamity
Do some people discover that
"By the sweat of thy brow"
Is the best digestive agent—
Even then they prefer
To take this medicine
In tabloid form.



The calamity which we think
We cannot possibly withstand
Is one which thousands of men
Just like us—
Have lived through.



To be contented with small profits
Is the corner-stone of sure business.



The tricks of the vegetable merchant
Ruin mammoth enterprise.



The man who sees nothing in business
But the money has missed his calling—
He should have tried safe-cracking.



Dynamic men
Apply theory
To achieve
Greatness.



Theory
Is ineffectual
When applied
By feeble hands.



The cry of misogynists
That man only marries for selfishness
Overlooks the provision of Nature
In giving most creatures more than one leg
To travel on.



The positive in nature is lame
Until linked with its harmonic negative.



The psychology of the human mind
Is so perverse
That the brow-beaten are often
The most loyal.



Love showered on the unworthy
Wins indifference if not contempt.



At close range inferior intellects
By the coarseness of their nature
Often dominate their mental superiors.



The fineness of fibre in some characters
Will cause a suspension of their
Mental processes
When harassed by the uncouth.



Those who are hurt the most
Have the least to say.



The majority rules
By listening to the shouting minority.



It is easier to combat the Devil
Than to fight with uncertainty.



Friendships rushed
Are quickly crushed.



Insomnia is not merely nocturnal wake-
fulness
But being awake and worrying about it.



The sympathy we get for losing sleep
Makes it hard to overcome insomnia.



The joy of martyrdom
Is the master of self-deception.



Washington's Next Move in the Far East

Two months have rolled by since the abrogation by Washington Government of the 1911 Trade Treaty between Japan and the United States, and what the next development may be in the relations of the two powers remains obscure.

It has been made apparent through recent weeks that a damper has been put on the movement at Washington to impose a general trade embargo against Japan. A number of considerations have caused American political leaders to deem it prudent to let this particular sleeping dog lie for the time being, but the situation holds no guarantee that somebody in the State Department may not decide to give the animal a clout and so swiftly change the face of things.

It is scarcely to be expected that the existing state of affairs can continue for any length of time. The week-to-week treatyless situation bristles with uncertainties. In consequence of action taken by both Washington and Tokyo the trade relations of the two countries have not been modified by any administrative action. Conditions, it is true, remain just as they were when the treaty was in force, but the possibility of abrupt over-night changes not only affects the commerce of the two countries adversely, but is productive of an unhealthy state of feeling and a mounting resentment in the public mind in Japan. Traders on both sides of the Pacific, doubtful about what may happen, have had to shorten commitments and act cautiously in a manner to meet any eventualities. The situation reacts in many ways on the earning power of Japanese workers and on living costs, already seriously burdensome in Japan. To a lesser degree certainly, perhaps parallel effects have developed in parts of the United States.

The answer to the problem will be found in China, probably in a short time. Here has arisen a clear-cut issue over the question whether warfare between Japan and China is to continue or end. Involved in this issue are vast Far Eastern interests of many powers, and events now taking shape in China cannot but have a direct effect upon the relations of Japan and the United States. As an outgrowth of the hostilities two factions have arisen in China, one for peace, the other for war. The leaders of the peace movement have accepted peace terms that the Tokyo Government offered, and, anxious to end the conflict, Japan, conforming with the peace terms she offered, has placed the weight of her influence behind the efforts of the peace group. The Chungking régime, headed by Chiang Kai-shek, which appears determined to continue fighting, has the advantage of being the government recognized by the Western powers, but has lost the coastal regions, the large cities and the lines of transportation of the country, all of which will fall into control of a new Government being launched by the leaders of the peace movement headed by Wang Ching-wei. The Wang Ching-wei régime, committed to opposition to the spread of Communism in China, will have to face Russian hostility. It will lack recognition from most of the great Occidental powers and, in all likelihood, it will stand in high disfavor with the American State Department.

The Trend of Events

Even at this time evidence is not wanting to indicate that the American Government will exert its influence to oppose the new government of Wang Ching-wei, and to thwart Japan's aims in China. Japanese leaders have been made keenly conscious of the significance of the recent additional loan of twenty millions to China, for which special legislation was required, and of reported recent diplomatic exchanges at Rome in which, it is said, the American State Department sought to influence the Italian Government to withhold recognition from the new Government of China. Whether the course the Washington Government has been following in the Far East ultimately will prove to have been in the best interests of the American people is a question that must be left for future historians to answer. At this time we may at least guess at probable necessities and consequences that must grow out of what is being done. It appears that our American Government has backed a horse in this Far Eastern handicap and is determined that it must win, even if we have to climb into the saddle and drive ourselves. We are going to have to do just that, or hedge the bet, if we want to avert loss. Riderless, assuredly, the horse will get nowhere.

Certain highly pertinent considerations should not be lost sight of at this time. A number of these were dealt with recently in a short article in the *Baltimore Sun* written by the well-known American author, H. L. Menken * * * The Japanese, this eminent writer explains, are a people of very considerable talents, and will have to be reckoned with in the future history of the human race. They have long since got past the stage of sitting respectfully at the feet of the West. For a generation past they have been squarely on their own and making swift progress. In all the fields of human endeavor save theology, politics and social justice, they are showing the way to their mentors. They have made important and durable contributions to knowledge in each and every one of the exact sciences, and they have taken such a lead in trade and industry that the only way left to beat them is to murder them.

This device has been advocated earnestly by the baffled entrepreneurs of other countries, and especially by those of England, but unfortunately its execution would probably be difficult, for in addition to all their other gifts the Japanese show a considerable knack for war. This knack was not borrowed from the West; it goes back to the remotest days of Japanese history. But it has been cultivated by contact with the West, and is now manifested in purely Western terms. The Japanese have a navy that surpasses all other navies save those of England and the United States, and an army that in active strength and trained reserves is outnumbered only by the army of the Soviet Union.

Not Always Honest

The achievements of that army in China during the past two years have been generally cried down by the American newspapers, but that is only saying that the foreign news appearing in American newspapers is seldom accurate, and not always honest. In large part it is written by bitter partisans, and not a few of them seem to be wholly unable to distinguish between agreeable fantasies and objective facts. The Japanese naturally get the worst of this wishful thinking. Their imminent collapse and defeat has been announced over and over again, and every time they have given the poor Chinese another wallop elaborate efforts have been made to prove that the only permanent damage it has done has been to the Japanese themselves.

It may well be that the majority of Americans swallow this nonsense, and look confidently for the ultimate triumph of the Hon. Chiang Kai-shek, but if so they are doomed to a disappointment almost as tragic as the one that apparently awaits them in Europe. The plain fact is that the Japanese, under enormous difficulties, have performed a military feat almost unparalleled in modern times, and at a cost in men and materials that seems, by European standards, to be hardly more than trivial. With an army that, at most, cannot have run beyond 1,000,000 men, they have taken all the principal cities of China, driven its Government into the far interior, seized all its main lines of communication, cut off nearly all its supplies and commandeered at least nine-tenths of its trade and industry.

Armed Indians Recalled

The argument that there are still armed Chinese in this colossal conquered territory is of very little appositeness. There were armed Indians roving the American West until the middle 90's, and not infrequently they tackled and defeated small parties of Federal troops, but no rational person maintained that they still held the country. They were doomed from the moment the army seized their principal strongholds and began to harass their lines of communication. They went on bushwhacking for almost a generation, but they were never able to wage anything properly describable as organized war, and their ultimate doom was always certain. So with the Chinese. They may fight gallantly and for a long while, they can never win.

Part of the propaganda against the Japanese consists in spreading the legend that they fell upon an unarmed and unorganized enemy with overwhelming strength, and so engaged in a series

of brutal massacres rather than in formal war. Nothing could be further from the truth. The Chinese, at the start of the uproar, had a very large and well-equipped army, and it had been in the field for ten years. Many of its units had been trained by European professionals, principally Germans and Russians, and they gave the Japanese plenty to think about in the first fighting at Shanghai and thereabout.

Moreover, this army had ample sources of supply. There were arsenals in most of the big cities, and an enormous mass of material was sent in by the Soviets. The French also helped, and the English were not far behind. Such things as food, clothing and labor-power were present in virtually unlimited amounts. The Japanese on their side, had to bring everything, from men to rice, across the water, and nearly all their landings were made in the face of violent resistance. Once they had landed, they faced an extremely difficult terrain, and that must have been a rare battle in which they encountered odds of less than four to one.

Despite all this, they beat the Chinese nine times out of ten and not only beat them, but routed them. Very few of the retreats of Chinese army were orderly. Much more often it fled helter-skelter, with all its will to fight oozed out of it. In the early days of the war, American newspaper readers were entertained with daily accounts of the stupendous feats of the Chinese air force, most of it provided and manned by Soviets. But its superiority turned out to be as mythical as that of the Soviet air force in Spain. In a little while the Japanese had it on the run, and in all of China proper they are now in complete command of the air. Over and over again they have sent fleets of bombers all the way to Chungking, a good thousand miles from the coast, and brought them back with only the most trifling damage.

That the Soviets have been doing any better along the Mongolian border is to be doubted. In war both sides tend to overestimate the losses of the enemy, but certainly the Japanese reports are likely to be more reliable than any emanating from Moscow. The Japanese lie now and then, but the Soviets lie all the time, and the fact remains brilliantly plain that the Japanese are still on the border, and still menacing the Soviet communications from the north and west.

Bad Press Given

It is well to give an occasional thought to facts of this sort in such mad, glad times as these. The Japanese had a bad press to begin with, because of the general unpopularity mentioned, and in recent months they have brought down on themselves a double dose of moral indignation by presuming to threaten the lucrative Chinese trade of England. The United States, as usual, has succumbed to English influence in the matter, both officially and journalistically. The State Department denounces the Japanese for interfering with foreign rights in the war area, though it condones and even applauds the total destruction of foreign rights in Mexico, which is presumably at peace. And the newspapers belabor them virtuously for their wicked aggressions in China and elsewhere, though remaining charitably silent about the Soviet aggressions in Outer Mongolia and Chinese Turkestan, not to mention China itself.

The Japanese, in truth, had as sound a mandate to clean up China as the United States ever had to clean up Cuba. Wracked by constant civil wars and afflicted by a long succession of tin-pot Hitlers of the Chiang Kai-shek species, the poor Chinese were in a state of chaos and constituted the sort of nuisance that no neighbor of any spirit could endure. They appear to be quite unable to govern themselves. For centuries they have escaped from one foreign hoof only to come under another. There is no evidence that the Japanese will govern them less competently than the Manchus; indeed, all the probabilities run the other way. In any case, there seems to be no way to stop the process. Whatever altruistic Power tries to do so, whether it be the Soviet Union, or England, or the United States, will come out very painfully convinced that it has been in a war.

* * *

Abrogation of the Trade Treaty with Japan by the Washington Government may have been due in some measure, as has been said, to a political situation that arose in American domestic politics. The reason for the action given publicly by Mr. Cordell Hull, the Secretary of State, also has validity. His explanation that the treaty included "provisions that need new consideration" undoubtedly has sound basis. Still, it has to be admitted that the

main cause for the action is to be found in the pressure brought to bear at Washington by those special interests that are antagonistic toward the Japanese and are, therefore, vociferously sympathetic with a hard-pressed Chinese régime. If the belief was held that the abrogation of this treaty would compel Japan to swerve from her announced purposes in China, then it must be abundantly clear now that the hope has failed of realization. On the subject of the termination of the treaty the Japanese have said little, but they have tightened their belts, not merely to meet the new situation that has arisen, but to counter the next logical blow, while they have proceeded in carrying out their undertakings in China. The impending important event on this program is the formation of the new Chinese Government at Nanking under leadership of Wang Ching-wei. If this new Chinese Government is to meet with opposition and hostility from Washington, it cannot be expected that the new Nanking régime will be particularly well-disposed toward American interests in China, nearly all of which will be well within the ambit of the new government. It is not likely either that warfare in China will be brought to an end with the advent of a new government; it will only undergo a change. In a sense this will be a reversion to the familiar pattern in China of one faction fighting another faction, but with the difference that the United States will have thrust itself into alliance with one of the warring factions.

Noting an Omission

It is noteworthy and significant that late in February the American Secretary of State, Mr. Cordell Hull, was moving actively to obtain extension of the American Reciprocal Trade Program for a further three years, urging that it would increase American prosperity and be a dominant factor in bringing about world peace. No information had then or since been made public that any steps have been taken regarding the "need for new consideration" of American and Japanese trade relations, mentioned by Mr. Hull at the time the 1911 Trade Treaty was being abrogated. It may be pertinent here to offer a quotation from a recognized American authority, Dr. A. Whitney Griswold, Assistant Professor of Government and International Relations at Yale University. He is author of the recently published work, "American Far Eastern Relations," generally accepted by students as the most authoritative book on the subject.

Ever since the beginning of the China incident wrote Dr. Griswold in an article that recently was published in *Asia*, there has been agitation within the United States for an embargo of the sale of war materials to Japan. By the spring of 1939, American sympathies for China had expressed themselves in the form of an official loan to the Chinese Government and an unofficial and yet fairly effective embargo of the sale of arms, ammunition and implements of war to Japan. Needless to say, no such loan had been offered to Japan, and weapons and war materials of all kinds continued to be sold to China. But the demand was growing for more stringent measures, for an extension of the unofficial munitions embargo to include the sale to Japan of materials that could be put to military usage—oil, trucks, steel, scrap iron and so on.

The measure found its popular support among individuals and organizations into whose motives it is not our present purpose to inquire. One broad, publicly acknowledged purpose commended the project to all, and lent it strength even in the eyes of persons who had no particular knowledge of or interest in, Far Eastern affairs. This was to attack the collaboration of Japan with the Rome-Berlin axis and so redress the balance of world power in favor of Great Britain, France and, it was hoped, peace. The United States could not honorably impose an embargo on Japan while still a party to the 1911 treaty. Hence it was abrogated. The action was immediately acclaimed as a step toward breaking up the axis and averting a world war.

Soon after it was taken, however, a revolution in world politics and a long-dreaded European war intervened to shatter these hopes and to modify, perhaps fundamentally, the premises from which they sprang. Like a series of earthquakes, the Nazi-Soviet pact, the Soviet-Japanese truce in Outer Mongolia and the Red Army's invasion of Poland shook pre-war political alignments to their foundations and toppled their ideological superstructures. As the dust cleared, two things became apparent. First, the German-Japanese partnership was at least momentarily dissolved. Second, a balance of power had been restored to the Far East that had not existed there since 1931, perhaps not since 1914.

Mr. Josef Stalin did not, as was at first expected, turn his back on Europe. But, even if his Polish adventure should whet his appetite for further conquests along the Baltic, in the Balkans or in the Near East, the very fact of his treaty with Germany, added to the fact of Germany's preoccupation with Britain and France, increases his freedom of action in the Far East as it decreases Japan's. The Outer Mongolian truce immediately inspired rumors that a much more comprehensive Soviet-Japanese understanding would follow. Suppose it does. Japan will now have to reckon with a vastly more potent Soviet Union than the former butt of the anti-Comintern pact. She will have to concentrate on maintaining a strong front against her old antagonist. That is the only way to keep such an international friendship. And, as Premier Benito Mussolini could testify, it requires considerable concentration.

Soviet Union Free

Will Mr. Stalin assume the rôle of honest broker between China and Japan? Will he treat China as he did Poland? Has he fixed his eyes on the ice-free harbors lost by the Czar to Admiral Togo and General Nogi? For the first time since the rise of Mr. Adolf Hitler, the Soviet Union is free enough, and for the first time since the world war strong enough, to move in any of these directions with impressive chances of success. Whatever bargain may be struck by the Soviet Union and Japan will be more Soviet than heretofore—perhaps more Soviet than Japanese.

Meanwhile, what plans is Britain making? Will Britain, Japan's ally from 1902 to 1922, and since then ever watchful of its entrée in Tokyo, find a basis for reviving, in some form, its old association with Japan? Or will Japan pursue an opportunist neutrality, poised between the Soviet Union and Britain and awaiting only the chance—or provocation—to overrun the latter's Far Eastern possessions? Until these murky elements settle themselves into more definite patterns, an anti-Japanese move in the Far East might acquire an anti-British significance in Europe. An effective American economic sanction, directed exclusively against Japan, might prove a shot in the dark that struck a friend instead of a foe.

The possibilities are raised not to prove the unwisdom of abrogating the 1911 treaty but rather to suggest that present circumstances, unforeseen at the moment of abrogation, may call for a broad, more constructive American policy than the mere imposition of an embargo—something in addition to, if not instead of, an embargo. In the first place, if the neutrality laws are revised so as to permit the sale of war materials to Britain and France, there will be little or none available for sale to Japan. Even with the laws unchanged, domestic needs will probably be increased by the exigencies of national defense.

Importance Enhanced

Secondly, the war must inevitably enhance the importance to Japan of its commerce with the United States. Normally not less than 64 per cent of its exports and 53 per cent of its imports are bought and sold in the United States and the British Empire. With the entire resources and not only of the British Empire but also of France and Germany concentrated on the war in Europe, Japan's dependence on American raw materials and heavy industries should increase proportionately. As the belligerents progressively restrict their imports to war necessities, in which Japan is itself deficient, its dependence on the American export market should increase even more drastically. Add to these economic factors the return of the Soviet Union as a Far Eastern Power and you may perceive the enormously improved bargaining position enjoyed by the United States *vis-à-vis* Japan as compared with last July.

How shall we make use of it? On the practical answer to that question hinge many historic issues. It is always easier to define the objectives than it is to define the conduct of a policy. The latter falls necessarily within the sphere of professional diplomacy, into which public knowledge rarely penetrates. So much depends on the timing of diplomacy, on the opportune relation of apparently unrelated factors, that the most thoroughgoing Democracy must delegate vast administrative responsibility to its diplomats. Not even in peace-time, much less in wartime, can the American public know the exact current details of international relations, no matter how far inside Europe or inside Asia its enterprising reporters manage to crawl. What the public can know,

and use at least for its own instruction, is the always important, often decisive, historical background that produced the events concealed in the diplomatic pouches.

Redefinition Natural

It seems inevitable that the two predominant Powers of the Pacific, whose trade with each other is voluminous, should redefine their commercial treaty relations. Could they not at the same time at least break ground for a settlement of some of their outstanding political differences? For 40 years Japan and the United States have been drawn together by powerful economic forces, despite almost constant friction in the realm of politics. Though at odds over the integrity of China, naval ratios, salmon fisheries and immigration laws, Japan is our third best customer and we are Japan's best customer. Contrary to the sanguine prophecies of a century, China's share of our foreign trade—a polar magnet of our Far Eastern policy—has, since 1900, averaged less than one half (often a third) of Japan's share. Three decades of diplomatic bickering with Japan have not reversed this stubborn trend. May it not now serve as a bridge over certain hitherto insurmountable political obstacles? Would it not, in short, further the immediate, material interests of the United States and lead to a political dispensation in which others besides the United States might profit, to negotiate with Japan a new, unconditional most-favored-nation agreement identical with the trade agreements of the Hull program?

The project has long been under discussion. Two primary objections have been raised against it. Protectionists warned of a deluge of cheap Japanese manufactured goods, and the public identified Japan as a partner of Germany and a member of the "aggressor" bloc with which no such agreement was desirable. The first objection has been encountered in the negotiation of every one of the existing score of trade agreements. For a detailed consideration of it, we must look to the State Department experts, who have doubtless made the most thorough analysis of the commodities and regions likely to be involved. The validity of the whole underlying assumption of the trade-agreements program is likewise a matter for special discussion. It is here taken for granted that, although the program has not proved a wonder-working providence in the furtherance of American prosperity or world peace, it is a practicable and eminently desirable means of promoting American commerce. In particular, it affords one possible approach to the immediate problem at hand.

Japanese competition in domestic and world markets has become a favorite American nightmare. Let us snap the light on and see if it goes away. Since 1937, Japan's chief threat to the American market, cotton textiles, has been dispelled by voluntary quota agreements between Japanese and American producers. Since 1930, the trade balance between the two countries has been in favor of the United States. In 1936, the United States accounted for 11 per cent of the world's total imports, 11.9 per cent of its exports. Japan's corresponding percentages were 3.6 per cent and 3.8 per cent. In Latin America, where it is thought to have been making inroads on our business, Japan's sales in 1938 amounted to a mere 2.6 per cent of that region's total imports. The United States's share (twice as large as our nearest competitor's) was 36.1 per cent.

Exports Necessary

Japan must sell somewhere to raise the exchange from which to buy from the United States, especially in view of Japan's unfavorable trade balance. Its cheap labor and low standard of living can scarcely compensate for its lack of capital and natural resources. They should hold no terrors for the United States, infinitely richer not only in capital and natural resources, but in technical proficiency and capita productivity—the true qualities of success in foreign trade. In any case, a trade agreement admits of quota limitations, and the chief-supplier formula has been used in most of the pacts to insure American producers against an inundation of competitive goods.

What about Japan's efforts to build up an imperial autarchy? What about Manchoukuo and the yen bloc? Great Britain, possessed of the oldest, largest and richest empire in the world, has not freed itself from dependence on American markets, industries and raw materials. The United Kingdom is our best customer to-day with a British Dominion, Canada, ranking second. Japan's, changing

needs may periodically alter the type and quality of its imports from the United States. But can it ever dispense with them entirely? A trade agreement might help to induce it not to try.

Is not the very elasticity of such an agreement a point in its favor? It could be extended to cover not only Japan proper but also all Japanese-controlled areas on the Asiatic mainland, that is, all areas in which Japan maintains garrisons, regulates the currency or collects the customs. Or it could be limited to the Japanese Empire as it existed, say, in 1931. We could match its expansion or contraction by including or excluding our own colonies and areas of special influence.

Exceptions Cited

For example, we maintain a preferential trade agreement with Cuba that is an exception to the unconditional most-favored-nation rule. Moreover, we protect our trade with our own colonies (the Philippines, Guam, American Samoa, Puerto Rico, the Virgin Islands) and the Panama Canal Zone by specific exemptions in the trade pacts. That is, we place all third parties on an equal footing before the tariff applying to the colonies, with which we ourselves maintain free trade. The open door to colonial trade on equal terms with the mother country is practically non-existent in the present world. The not-quite-so-open door to colonial trade on terms of equality with all other third parties via the unconditional most-favored-nation clause is the only kind worth talking about to-day.

Actually, this is the only open door that has ever existed in China. John Hay's famous notes of 1899 failed to elicit any more generous treatment from the various Powers holding territorial concessions in China. Even in their spheres of influence, areas over which they had no legal sovereignty, one and all employed a variety of means to discriminate against competitors in favor of their own nationals. A Japanese guarantee of unconditional most-favored-nation treatment applying to Manchoukuo and the amorphous yen bloc would therefore come very close to approximating the historical open door in China. If it would not place American exporters on an equal footing with Japanese, it would at least place them on an equal footing with all other foreign exporters. This in itself would be an advantage. Even should the scope of the pact be limited to the Japanese homeland, the latter could be regarded as a funnel for imports destined for Manchoukuo, and commodity categories could be drawn up accordingly.

As for the political dividends the pact might be expected to yield, as well as the political objections heretofore confronting it, the new alignment of the powers may have increased the former as it appears to have decreased the latter. As compared with Japan's economic relations to the United States and the British Empire, Germany normally takes only 1.3 per cent of Japan's exports and supplies but 4.2 per cent of its imports. Japan's membership in the axis did little to increase its German trade. Do these relations not speak for themselves? An economic affinity that defied the most impressive ideological barrier in modern history served as a cornerstone of the Nazi-Soviet pact. Why should not the same factor lead Japan into better relations with Great Britain and the United States?

Time Scarcely Ripe

A trade agreement could not, obviously, end all the earthly woes to which the American Embassy is witness. The time seems scarcely ripe to discuss American recognition of Japan's "new order," on the one hand, or Japan's repudiation of it, on the other. There may never be "peace in our time" in China because "our time" is finite. Japan and China may only have entered the second quarter of a modern Hundred Years' War, in which it will take the Chinese as long to drive the Japanese across the Yellow Sea as it did the French to drive the British across the Channel. And, even though the Hundred Years' War came to an end in 1453, the British and French did not really make peace until 1904, the year of the Entente Cordiale. Two things only appear to be certain: Japan's attack on the Chinese people has blasted the Pan-Asia myth in all its aspects—the Yellow Peril massing its legions against the West—as high as Napoleon or Mr. Hitler blasted Pan-Europeanism. That Japan will gain in China the military resources with which to assault the United States in the Western Hemisphere is one with the ideas the Kaiser tried unsuccessfully to sell to even so ready a customer as Theodore Roosevelt.

These problematical vistas of the future do not, however, exclude breathing spells during which China could, if it would, gain strength. The United States has no political ambitions nor any primary national interests that need draw into China's wars. A powerful China is not likely to be much more hospitable to the foreigners of the treaty ports than is a victorious Japan. On the other hand, the American people will always sympathize with the victims of oppression, and as long as there is fighting in East Asia there will always be dynamite for American diplomats to handle. To sever ourselves from all trade and commerce with the Far East until the last battle is fought is another chimerical notion. Why should we not continue to do business there, holding fast to the objectives outlined as our national interests, pursuing a flexible policy that seizes the advantages of the moment and places all American national interests in their true proportions? If we cannot cure all China's ills with a trade pact, the latter might provide the atmosphere, possibly even the occasion, for armistice proposals to both China and Japan.

Pledge Might be Possible

If this possibility proves to be Utopian, there are few less complicated problems that might be solved. An exchange of non-aggression pledges covering the islands of the Pacific should be not more difficult now than it was in 1908, the year of the Root-Takahira agreement, or in 1924, the year of the four-Power treaty. Would it be worth any more? If accompanied by a renewal of the non-fortification agreement (Article XIX of the five-Power Naval treaty) even though restricted in geographical scope, but including provisions for systematic joint inspection of the territories covered, it certainly would be. This would require a concession from Japan. So would a definitive settlement of the Alaska salmon fisheries dispute, a source of acute infection of the diplomatic blood stream. Japanese floating canneries operating off the mouths of Alaskan rivers have given rise to Alaskan and West Coast demands for legislation reminiscent of the immigration and alien land laws. Japan would have as hard a time bucking these currents to-day as it had in 1924. It might better yield to them. Another Japanese offering that would win both popular and official approval in the United States would be a firm disavowal of political ambitions in Latin America.

Such Japanese concessions as these, we suggest, are not Utopian. With what could the United States meet them? We are in no mood for appeasement. Fortunately we are not confronted with that melancholy alternative. A trade pact of equal value to both parties would not be appeasement. Neither, in the historical context of our Far Eastern policy, would certain other concessions. A non-fortification agreement would save us money and perhaps, if the European islands of the Caribbean are any sample, prove the most secure defense of Guam and the Philippines.

Recognition of racial equality, no more than a formality to the United States, would still win confidence from the nation that has always looked in somewhat baffled friendship to the American people. Placing Japanese immigration under the quota system (the mere fulfilment of an old intention) would improve the consistency of our most-favored-nation claims on Japan. The volume of immigration could thus be maintained at its present level and, at the same time, an ancient blight on Japanese-American friendship be removed. Were this done, Japanese students might reappear in American universities, from which they have tended to absent themselves since 1924. By the process of example and emulation they might then take home to Japan ideas and principles that we have not been able to impart to them by diplomatic notes and maneuvers. The United States may some day awake to the realization that example is often a better teacher than coercion—especially ineffective coercion.

We have said nothing of naval limitation, for at the moment this appears definitely Utopian. It might only stir futile controversy to remove it from that shadowy realm. A navy is a tool, not an objective. Larger and wealthier than Japan, faced by more widespread and more exacting needs, we cannot, in the nature of things, accept a treaty obligation of complete equality. Moreover, we should not forget that, whatever the future holds for Japan, it remains the world's third greatest naval Power and the Pacific's second greatest, with no other Power on earth capable of serious menace to its maritime security except ourselves. China

(Continued on page 100)

Readjustment of American-Japanese Relations

By KATSUJI DEBUCHI, Former Ambassador to the U.S.

(Contemporary Japan)

JAPANESE-AMERICAN relations had their beginnings eighty-six years ago, in 1854, when a treaty of amity was concluded between Commodore Matthew C. Perry and the representative of the Tokugawa Shogunate at Kanagawa. Shimoda and Hakodaté were opened as treaty ports and Japan emerged, after two hundred years of seclusion, ready to take a place in the family of nations.

From the opening of Japan in 1854 down to the Russo-Japanese War (1904-5), a spirit of good neighborliness characterized Japan-American relations. Worthy of special notice indeed is the fact that in this half century American sympathy and goodwill played no small part in Japan's successful laying of the foundations on which she built in her rise to the status of a major world Power—a status which was established definitely as a result of her victory over Russia. This growth of Japan's power, however, adversely affected relations with the United States. America began to feel ill at ease over Japan's rapidly growing strength and matters were made worse by the jealousy and suspicion evoked among certain groups of Americans over the question of the Japanese in California.

Happily a further aggravation of the situation was prevented by the conclusion of the Gentleman's Agreement and the Takahira-Root Agreement in 1908. But the respite was only temporary and other points of dispute arose. One may list among many things the commercial rivalry between Japan and the United States in Manchuria, the proposals made by Philander C. Knox, American Secretary of State, for the neutralization of railways in Manchuria, Japan's so-called twenty-one demands on China, the Nishihara loans to China and the joint expedition to Siberia by Japan and the United States. And on top of all this came the naval competition between Japan and the United States caused by the Daniel expansion program.

Such was the background of the Washington Conference, held after the end of the World War. This conference was effective in bringing about a decided change in the situation, for not only was agreement reached on the question of naval limitation, but a Nine-Power Pact was also signed and a treaty drawn up providing for the retrocession of Shantung to China by Japan. At the same time, moreover, the Anglo-Japanese Alliance, which had not been viewed with a kindly eye by the United States, was terminated.

The future was full of promise and the warm sympathy shown Japan by the United States at the time of the great earthquake in Tokyo in 1923 seemed to confirm this promise. But in the following year this bright picture was marred by the action of Congress in passing the anti-Japanese immigration act. The future for a time looked less rosy; however, the fair and impartial attitude maintained by Japan at the Geneva Disarmament Conference in 1927 went a long way toward promoting friendship between the two countries, and later, in 1930, as a sequel to the conclusion of the London Naval Limitation Treaty, Japan-American relations improved to a still greater degree.

In April the following year T.I.H. Prince and Princess Takamatsu visited the United States and the whole American nation, from President Hoover down, welcomed Their Highnesses with whole-hearted enthusiasm. It was that same year, on April 29, the birthday of the Emperor, that Henry L. Stimson, then Secretary of State, sent a message of congratulation to Japan in which he said: "We can say in all sincerity and gratitude that no clouds lie along the broad expanse of the Pacific to hide one of our countries from the other." The writer knows personally that this message was not sent as an act of mere diplomatic courtesy, but on the contrary expressed the true sentiments entertained by the American nation toward Japan at that time. Moreover, Mr. Stimson, in his book *Crisis in the Far East*, written after his retirement, remarks apropos of the situation prevailing when he sent his message that the time was felt to be almost ripe for an amendment of the anti-Japanese immigration act.

Soon afterwards, however, the Manchurian incident broke out, with the result that sentiment against Japan ran high in America.

In January, 1932, Mr. Stimson announced his doctrine of non-recognition, creating between the two countries such a gap as defied all attempts to bridge it. Developments since that time are still fresh in the public memory and the writer does not intend to dwell on them. Feelings in both countries were exacerbated, particularly after the outbreak of the China affair, and finally on July 26, 1939, the United States Government notified the Japanese Government of its desire to terminate the 1911 Treaty of Commerce and Navigation.

What were the immediate circumstances leading to the American denunciation of the 1911 treaty and what courses has Japan to take in order to cope with the situation? It must be said first of all that the American action in so suddenly denouncing the treaty was unwarrantable. It struck us as a measure quite inconsistent with the long-standing friendship between the two countries. Such self-centered conduct on the part of America is, however, not without precedent. The reason for this must be sought presumably in the political organization peculiar to the United States. A kind of dual diplomacy is operative, because of the obligation on the part of the President to follow, in many cases, the diplomatic lead of the Senate, which usually acts in deference to popular wishes. Consequently, domestic considerations may take precedence over principles of foreign policy, with the result that sudden, unexpected and even self-contradictory changes are possible in American diplomacy. These circumstances have not always been fully understood by Japan, which has a political structure fundamentally different from that of the United States; hence it has often been difficult for Japan to take a course of action that would effectively counter the erratic moves of American diplomacy.

Space forbids a consideration of all the reasons, both domestic and foreign, behind the United States' denunciation of the 1911 Treaty of Commerce and Navigation. The major cause of the American action, however, lay in the failure of the Neutrality Amendment Bill in July of last year. Following the successful action of the Senate Foreign Affairs Committee against the Bill, Senator Pittman, Chairman of the Committee, introduced into the Senate a bill providing for embargoes on the export of arms, ammunition and other war supplies to Japan. The State Department pointed out that such embargoes would violate the terms of the 1911 treaty with Japan; whereupon Senator Vandenberg, the Republican candidate for Presidency, with the intention of discomfiting the Democratic Party, submitted to the Senate a bill calling for denunciation of the treaty with Japan. Anticipating that the Vandenberg Bill would pass Congress in view of the widespread anti-Japanese feeling in the United States and prompted by the desire not only to make up for his failure over the question of amending the Neutrality Act but also to forestall the Opposition, President Roosevelt therefore suddenly notified the Japanese Ambassador at Washington of the desire of the United States Government to abrogate the 1911 treaty. Public opinion upheld this move on the part of the President, who thus achieved at least a temporary political success.

It is interesting at this point to consider the factors that made for such wide public support of the President's drastic action. In the first place it must be observed that idealism plays an important part in the moulding of American public opinion. To American idealists Japan appears as a violator of the Nine-Power Treaty, who has, without scruple, trampled underfoot the territorial integrity of China, and violated the principles of the Open Door and Equal Opportunity in that country. They hold that the United States, which has pledged itself to maintain international peace on the basis of sanctity of treaties, can under no circumstances recognize the legality of Japan's case.

In the second place, sentimentalism is also an important factor in the formation of public opinion in America. American sentimentalists denounce Japan's military activities in China, which, according to them, have been accompanied by indiscriminate bombings and have reduced the Chinese masses to an extremely

pitiful plight. They further charge that Japan, under the pretext of military operations, has not only endangered foreign lives and injured foreign property in China, but has also restricted the freedom of foreign nationals there and heaped insults upon them. Such a situation, therefore, could not, in their opinion, be allowed to go unchallenged both from the legal and the humanitarian viewpoint.

Again, there are many Americans who criticize Japan's actions in China from the economic angle. They contend that Japan in her so-called construction of a new order in East Asia plans to monopolize all fields of economic activity, including those of commerce and navigation. In other words, they claim that Japan means to shut the foreigners out of China.

The last but not the least important factor in the hardening of American sentiment against Japan is the repugnance felt by most Americans toward the totalitarian States. They argue that Japan attempted to form a joint front with Germany and Italy against Great Britain and France, thus challenging the principle of democracy. They further point out that Japan will not rest satisfied with Manchuria and China, that she is secretly coveting land to the south and that the future of the Philippines is menaced.

What attitude should Japan adopt in view of this trend of American public opinion? American idealism, which has close connections with the Stimson doctrine of non-recognition, threatens to remain for a long time a stumbling-block in the way of a readjustment of Japan-American relations. A section of the Japanese public advocates termination of the Nine-Power Treaty forthwith; but setting aside the propriety or otherwise of this contention, it is likely that such a step would lead to endless academic discussion with the United States and would not make for improved diplomatic relations between the two countries. The important thing for Japan to do, while redoubling her efforts to make the American Government and people realize the fairness and justice of her policy toward China, is for her to demonstrate her special position and mission in East Asia by restoring order and stability in China as soon as possible. American recognition of the situation in this part of the world would then certainly follow.

The sentimental opposition of Americans to Japan's activities in China should never be made light of, because it is deep-rooted and widespread. The thousands of American missionaries in China keep this feeling alive and spread it through their mission headquarters at home, while actual Chinese propaganda is another factor. In this connection the American Government and people must be urged to recognize that large-scale military operations are still going on in China, and American nationals in China must be induced to take every possible care to ensure their own personal safety and to avoid entering the danger zone when there is no real necessity for them to do so. At the same time the Japanese military authorities are bound to do everything they can to safeguard the lives and property of American nationals in China, and to show as much consideration as possible for those Americans who make trips into the interior, provided such trips do not hamper Japanese military operations.

Complaints from America on economic grounds usually originate with American traders in China. Japan has no intention whatever of pursuing a policy of closed economy in East Asia, but on the contrary desires to co-operate with third Powers in the development of China. This point must be made clear to the American Government and people, while at the same time it should be explained that Japan may have to impose some restrictions on the participation of third Power nationals in the development of resources or management of means of communication that are vitally concerned with our national defence.

Incidentally, the Japanese Government's decision of December last year to open the Yangtze River up to Nanking under certain conditions, was a wise and timely measure. The Yangtze valley is more than five times as large as Japan in area and accounts for some 60 to 70 per cent of China's foreign trade. The opening of the river, therefore, will promote the welfare of the Chinese people, while it will also serve to draw closer the economic bonds linking Japan and China. But it is desirable that the upper reaches of the Yangtze should also be opened as early as is compatible with the safeguarding of strategic interests and that the conditions concerning the opening of the river should be made less exacting. If this were done, then the third Powers would certainly begin to understand that Japan's attitude is based on fairness and justice.

The United States must then be induced to recognize exactly where Japan stands with regard to Germany and the Soviet Union. The Hiranuma Cabinet, which resigned following the conclusion of the German-Soviet non-aggression pact, held itself responsible for the turn which the international situation had taken and blamed Germany for her breach of international faith. And most Japanese people now believe that as a sequel to the signing of the German-Soviet pact, the anti-Comintern engagement between Japan and Germany has virtually been scrapped. As for Japan's alleged plan for co-operation with the Soviet Union, this has so far failed to obtain any considerable backing. Whatever their motives may be, it is a fact that advocates in Japan of *rapprochement* with the Soviet Union have not yet come forward with any arguments strong enough to convince the nation at large. It must be remembered that the Comintern was behind the Manchurian incident and has been persistently behind the China affair, and that the anti-Comintern pact was concluded primarily to combat such activities of the Comintern. Joint defence against the Comintern forms one of the major terms for the settlement of the China affair; hence any attempt to make a political deal with the Soviet Union beyond those measures of establishing normal relations between the two countries should be carefully avoided.

The writer has so far given his views on the circumstances leading to the American denunciation of the 1911 Treaty of Commerce and Navigation with Japan and also on the attitude Japan should adopt to cope with the new situation. The question now arises: What will be the policy of the United States in readjusting her relations with Japan?

In the opinion of the writer, it is most unlikely that the United States will go so far as to insist that Japan reaffirm her adherence to the Nine-Power Pact, or that she suspend her military activities in China or abandon her support towards the Wang Ching-wei régime; yet the United States will not for the time being be inclined to enter into negotiations with Japan for the conclusion of a permanent treaty of commerce and navigation, if her past and present attitude is any criterion. This is not to say, however, that she will not recognize the special position that Japan, as one of the major world Powers, occupies in East Asia; or that she will shut her eyes to the fact that Japan is a good commercial customer of hers. Thus the writer believes that she will most likely refrain from making any move likely to complicate the situation further—that she will not, for instance, discriminate against Japanese commerce or shipping following the lapse of the 1911 treaty. Already, indeed, a decision to this effect has been announced, following the conversations held in December last year between Admiral Nomura, then Foreign Minister, and Ambassador Grew. The writer believes in fact that after further sounding out Japan's attitude, the United States will be prepared to continue normal relations with Japan by concluding a *modus vivendi*.

What the United States apparently seeks of Japan is that the latter should: (1) settle the pending questions in China, (2) pledge the security of American lives and properties in China, and (3) guarantee freedom of travel and trade for American nationals in China. If such should be the case, then we should by no means be over-optimistic to hope for the conclusion of a *modus vivendi*, provided Japan concedes as much as is reasonably possible. A section of the Japanese public opposes partial concession on the ground that with the United States, which is so staunch a supporter of the Nine-Power Treaty, it would be a case of "Give an inch, he'll take an ell." The advocates of this opinion, anxious to swim with the stream, are urging the Government and people to pursue a vigorous policy toward the United States; but they do not seem to have any clear perspective as to what can be gained by further complicating the situation between the two countries.

In this connection it must be borne in mind that, although the Americans are a people who are apt to dash ahead, swayed by sentiment or by idealism, they are nevertheless able to stop short at the right moment and look realities squarely in the face. Take, for instance, the American attitude toward the Soviet Union. For more than a decade the United States had no diplomatic relations with the Soviet Union and then President Roosevelt, after he had been inaugurated, invited Soviet Foreign Commissar Maxim Litvinov to Washington and within a fortnight had concluded a Soviet-American trade pact. Again, the United States, actuated by the desire to see peace restored in Europe, is now extending the hand of co-operation to Italy, as though she had


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"What Should America Do in the Far East?"

By CARROLL LUNT

(Following is the text of an address that was delivered on February 17 last before the Foreign Policy Association of Springfield, Massachusetts by Mr. Carroll Lunt, Publisher of The China Digest and Spotlight and a resident of Shanghai through many years).

* * *

 ON January 26 of this year our trade treaty with Japan officially ended. This means that we have played a card in the great game of Power Politics, and now await the play of the Japanese before we table our next. We have to ascertain now what Japan's move will be, and to be ready to cover it, if and when it is made.

With that in view, let us examine the situation in the light of the question that has been put to us,—“What should America Do in the Far East?—Renew the Trade Treaty with Japan, or support China effectively?”

Let us take first the matter of supporting China effectively. What is meant by effective support for China? We have already advanced her money, and legislation is being enacted to advance her more. The moral support which she wants is being given in a large way, as is manifested in this country through the press and public forums. These are pretty effective forms of support.

But there is a strong call for still more effective support. The Hon. Henry L. Stimson believes it should be given by withholding those goods from Japan which she uses in her war efforts. This would necessitate the declaration of an embargo against Japan. Would that actually give China effective support? I believe not. Japan would probably follow that play with the unilateral abrogation of the Nine Power Pact, already abrogated by her in effect, the blockade of all Chinese ports and the exclusion of Americans from Japanese-occupied territory in China, or the imposition on them of very difficult restrictions. We should have to bow to that play, or play a card that would prove very costly, that is, send a fleet to East Asia to enforce our will on Japan. We should lose ships and many young men, there is no doubt, in the process of that enforcement.

Before engaging in such an eventuality, our navy would have to be large enough, not only successfully to engage Japan, but to be prepared for any menace from the Atlantic which the European situation pre-supposes. That would mean a divided fleet, each part of which would have to be strong enough to do what was required of it. Building up that strength would take a long time.

Few people think that Germany can be victorious against the Allies. But should the unlooked for materialize, and we are at that time engaged in a critical affair with Japan, where would we stand? Experts say that a German victory would be followed by an alliance among Germany, Russia and Japan; the seizure of the British navy, and German activity in Latin America. German activity in Latin America! Ah! That is something, isn't it? We could do little, if anything, against that menace, unless we had our fleet in full force on the Atlantic. We would not have it there if we undertook to give China what is regarded as effective support by declaring an embargo against Japan. That step would pretty certainly lead to the massing of our fleet in the Pacific, if not the sending of it to Far Eastern waters.

But let us assume, for the sake of examining every angle of this complex problem, that the Allies are victorious (and I am pretty sure they will be, and hope so, anyway) and that, having sent a fleet to the Far East and won a war against Japan, we are left with the question of what to do about China. It is certain that in that case the Chinese would not want us in their country any more than they want Japan, and we should be compelled to subjugate them, an act for which we so roundly condemn the Japanese, or get out. For the sake of giving China effective support, therefore, we should have lost billions in dollars and thousands of lives. We should have suffered this great loss for a principle—which is a doubtful one at best.

No, Idealism cannot require of us such a tremendous sacrifice, nor Imperialism the responsibility of guiding the destinies of an Asiatic people.

It is thought that an embargo would give effective support to the Chinese people. While American supplies are important to the Japanese in the conduct of the war, the withholding of them would not be the embarrassment which wish-thinkers claim it would be. There are many markets in the world available to the Japanese if they need them. Besides, it is not likely that they shall need them much longer, for, commanding all important strategic points in China, the main waterways, rail-heads, roads and the coastal ports, Japan will do little more, it would seem, than consolidate her position and support the Wang Ching-wei Government in its effort to depose the Kuomintang Government. The military side of the affair is almost over, and Japan is reported, anyway, to have supplies on hand to last several months.

In that case, the effective support to China of an embargo would be no support at all. The embargo would place the United States in a dangerous position. As I have said, we should be compelled to enforce respect for our position in China, our rights and interests there, or abandon the field. If we enforced that respect, the price would be enormous. If we relinquished our position in China, we should be losing not only an important political struggle, but our prestige as well.

But an embargo will not follow upon abrogation of the treaty, and the hypothesis I have outlined will never materialize, some may say, and may say further that the Japanese are certain to do nothing to make us enforce an embargo on their country, and even if they do, and we do impose so strict a penalty, she would then yield and back out of China. Do not be too sure of that. Having suffered casualties totalling a million men, and having spent twelve billion yen (about four billion American dollars), and being just as certain in the righteousness of their cause as we were when we subjugated the Filipino rebels under Aguinaldo, Japan would not surrender her position without a struggle. That struggle would be grim and long, for we all know that Japan's strength is on the sea, so far as we are concerned. To engage it successfully, as I have already said, we should have to wait some time while we built up a navy certain to prevail against it. In the meantime we could not help China, as a well-known authority recently stated, because such a war would mean that China's ports on the Pacific would be closed and the country laid open to the Soviet in the West and North. It would only be one more war to complete the destruction of world values and world standards. While in process, the Chinese would be at the mercy of the Japanese, as would our own people in East Asia.

To those who believe that China herself will in time defeat the Japanese and drive them to the sea (if we withheld our supplies from Japan and refuse her a new treaty), I would ask this: If the great Chinese Army which Generalissimo Chiang Kai-shek built up with the aid of expert German military officers could not prevent the Japanese Army of second and third class reservists from landing first and then penetrating many hundreds of miles inland, how can what is left of that army, and recent recruits, cut off to a large extent from supplies it needs, drive the Japanese out?

I do not disparage the fighting qualities of the Chinese soldier. I would like here to pay tribute to him as being the equal in courage and fighting ability of any other soldier. Did I not see him round Shanghai withstanding the powerful assault of Japanese artillery and bombers?

At the village of Tazang, eight miles from my home in Shanghai as the crow flies, he was killed by the thousands, but kept on filling up his ranks for six weeks before the Japanese pressure compelled his retreat.

It was only the better equipment of the Japanese and their ascendancy in the air which enabled them to defeat the Chinese. It is these advantages only which convince me that the Chinese will never be able to drive the Japanese into the sea. They may have their victories, like Taierschwang, but these can never be conclusive.

That being the case, it would seem that holding out against Japan in the expectation of ultimate Chinese victory would be futile.

With one or more of the disasters I have outlined almost certain to result from an embargo, those who advocate it as a means of giving China more effective support seem to be going at it the wrong way. Perhaps they do not realize to the full the dangers of such a course. Perhaps they are not fully informed regarding Chinese culpability as they seem to be regarding Japanese. Perhaps they have not seen the need for restraint when the lack of it is certain to aggravate an already aggravated world situation. Perhaps they do not realize the responsibility of the individual in building up public opinion, which might, without proper incentive, cause their country to suffer great losses in wealth and life. Whatever the line of thought which causes them to insist on drastic steps against Japan, that insistence is not helpful in a situation that cries out for help.

Already we are being made aware of the difficulties facing our people in Japan and China because of the situation the abrogation of the treaty has brought about. The new restrictions placed on Japanese residents in this country have caused the Japanese to consider similar treatment of Americans in the Japanese-controlled areas of China, in Manchoukuo and in Japan. "Equality of treatment for expatriates," they call it. It is telegraphed from Shanghai that the termination of the trade treaty faces Americans in the Far East with ominous possibilities, and that apprehensions have heightened because of the possibility of retaliation against American residents.

Well, we can't have our cake and eat it. We ought to have considered all these possibilities before we allowed sentiment to formulate public opinion that has, no doubt, influenced our Administration. Perhaps we did consider them and are quite prepared for the consequences. I have pointed out what these consequences probably will be,—I have expressed the belief that we shall be going the wrong way about it if we follow up the abrogation of the trade treaty with the further penalty of declaring an embargo, to enforce our will on Japan. How then should we act then in regard to the present situation between America and Japan? In venturing an opinion I shall have to make some observations that are seemingly extraneous, but pertinent, nevertheless.

If back of all the movements in this country which, centralized, are compelling us to take the steps we are taking, is the very natural urge for expansion of our interests abroad, then I would say that we should build a navy that could take on successfully any combination of navies which those who want to resist that expansion could array against us. I would advocate the establishment of an army of several million men and the building of a merchant marine capable of moving them anywhere in the world. With our resources we could do this, of course. As to the beneficial results of the influence we should exercise all over the world I am in no doubt. We have the necessary qualities, and so are quite able to take the rôle of master in world affairs. And I believe that unconsciously, and because of the very natural development that follows upon our good qualities, we are moving in that direction.

Our destiny, it seems to me, and despite the probability that we may not like it, is to be to the world of to-morrow what Great Britain has been to the modern world. But we have not yet been pressed into assuming the rôle because we do not yet feel the pinch in any direction, except, perhaps, in China. Secure in our isolated geographical position, and unaware yet that our swift development must lead to expansion or to inwardly or outwardly imposed restriction, we play with theories, and in smug respectability are profound in our advocacy of ideals. It is easy to be idealistic at the expense of others less well fixed and therefore closer to the expansion or restriction alternatives than we are. We are conscious only of our high ideals, not yet pressed by circumstances to be more conscious of power politics. Our attitude has evolved in that way.

With war-weariness and depression heavy upon us following the first World War, ideas of good neighborliness became so prevalent that the League of Nations got off on a good start. Tired of war as a means of countering forces disturbing the *status quo*, the leading nations of the world began to disarm, hoping that the example set, and the inability therefore of a neighbor to strike a blow at another, would give a strong fillip to the cause of peace. They did. We are still quite, quite sure that civilization has advanced, and that in our relations with each other we are much nearer than ever before to the Golden Rule. We are saturated with high principles. Upon the lofty platform we have erected, Justice stands as the symbol of our thinking and our being.

When Japan went into China we raised a great hue and cry about it. Our sensibilities were outraged, but we were ignorant of why she went into China. We were sure, of course, that nothing justified invasion. When Germany went back of her Munich pledges and gobbled up large portions of Europe, we shouted at the British and the French to do something about it. And when they did, we said, with less vigor, it is true, they wanted to run Europe for their own selfish ends.

I am not belittling ethics. Unless the world unites on strong moral principles, contention and wars are inevitable. Without principles we shall never develop as we think we ought to. But in a world where principles get certain lip service but little actual practice, it would be as costly for us to live on them and preach them, as more than we do it was for the world's greatest example of high-principled living—Jesus Christ. He lost all material benefits and his earthly life. We must be prepared to count and pay the costs, if we are to stand for the principles we try to practice in our own country and wordily insist upon them in all other countries. The spiritual welfare of America is guaranteed that way. It is no doubt the best way, for though material considerations guide our lives, the spiritual are what we believe at heart to be the greatest.

But since material considerations do guide our lives, and since they dictate the play of the cards on the part of those sitting in at the International game of Power Politics (now in one of its most exciting and dangerous sessions), it is wise for us to play our hand with care and skill, to ensure that we shall have our fair share of the Jackpots.

What shall we do then to secure for us the material welfare and the political influence we seek? I ask the question from the point of view of our position in the Far East.

Our material stake there is in the neighborhood of U.S.\$250,000,000. Our cultural stake, included in that figure, exists in fairly extended religious and philanthropic enterprise.

I take it we want to preserve these and to enjoy the rights and privileges we have always enjoyed in the Far East, commensurate with the dignity of the Chinese people. We want freedom for the Chinese people and justice for Japan.

I maintain that we shall be endangering these if we go further than we have gone in showing the Japanese that we mean it when we say we want these things. I have already presented you with reasons for this belief. It now devolves upon me to present you with a platform which I think we ought to adopt if we have the interests of America at heart and want at the same time to help the Chinese people and to be fair to Japan.

The first and only plank on that platform is a long and wide one, strong and big enough for us to stand on squarely. It was advanced recently by Prof. Philip C. Jessup of the Department of Law, Columbia University.

It is that we seek to use our influence to establish in the Far East a stable situation based upon the co-existence of two great powers—China and Japan, with both of which the United States should be on friendly terms.

We all know that countries devastated by war are liabilities to their conquerors for some time. We all know that military successes can never keep any country permanently eliminated from the diplomatic stage. If such a thing as permanent peace is possible, it cannot be secured by crushing and humiliating Japan or China. This country is strong enough to do just that. But there is a wiser way, the way I have just pointed out, working to secure a stable situation in the Far East, based upon the co-existence of two great Powers—China and Japan, with both of which we should be on friendly terms.

We are at present on very friendly terms with the Kuomintang Government of China. Our relations with Japan are strained for reasons which I need not reiterate. If there is a way by which we can improve our relations with Japan, we should make use of it. Not, however, at the expense of our own Oriental interests, nor at the expense of our treaty commitments.

It seems to me that the way we can best improve our relations with Japan is to disallow to sentiment the undue place it has had in our considerations and try to learn what is back of the whole affair in East Asia. That the Japanese have a strong case only the ignorant, the emotional and the prejudiced will deny. Leaving out of consideration the barbarities reported, and remembering that only those of one side have been reported in this country, it should be our business to speak and write and act in ways calculated

to lessen, rather than increase the intensity of the strain in our relations. It would be much easier for our Administration to work in an atmosphere of calm than in one of excitement.

By improving our relations with Japan we improve the chance afforded both countries by the non-treaty period of arriving at an understanding of American rights and privileges in China and the position of Japan in that respect. We also prepare the ground for a renewal of the expired treaty or a revision of it, upon which normal good neighborliness very much depends. Thirdly, we open the way to assist China in the great reconstruction work that is imminent, not in the way of helping her continue her forlorn and costly effort to drive the Japanese out.

Whether we like it or not—there is a New Order in China to-day. Our Government cannot escape that fact. As matters stand at present, the Open Door Policy, and its instrument of compulsion, the Nine Power Pact, block the way to a recognition of the New Order. They cannot, of course, be ruled out arbitrarily. Nor can they be given elastic interpretations in order to take in the New Order. But some diplomatic formula will have to be found if we are eventually to reach an agreement. I do not suggest that the mental sleight-of-hand which has characterized the activities of some of Europe's statesmen in recent months be employed in this instance. I merely say that if the new conditions warrant changes (as they do), then let us make those changes by arbitration, not by force. Anyway, the presence of the Japanese Army and Navy in China compels a positive attitude. We are faced with the alternative of effecting by diplomatic means those changes that will satisfy both our country and Japan and China, or of continuing a strained relationship that might lead to war. We can, of course, continue to suffer and protest against irregularities without renewing our treaty with Japan. But the surest way to the use of force in a final settlement lies in that negative procedure.

What I cannot understand is the strong desire of a certain type of people in this country to impose an embargo against Japan, when they seem utterly unconcerned about showing their disapproval, in similar fashion, against Germany and Russia for what they are doing in Poland and Finland. If it is because they wish to stop the threat of military despotism in East Asia that they call so vehemently upon our Government to act—there is a far more serious menace in Europe. Why don't we act against Germany

and Russia? If from an isolationist standpoint we do not want to get into the European row, why do we want to get into the Asiatic row? And is there not as great a call for a moral attitude in regard to Europe as there is for Asia? And if it is from an economic standpoint that we want to stop Japan, our stake in the Far East is far smaller than it is in Europe.

Before concluding I would like to suggest that we apply our ideals to the Japanese as well as to the Chinese. There is a humanitarian side to this question of renewing our trade treaty with Japan. So far we seem only to have remembered that Japan has done certain things in China which have cost us some of our rights and interests and have provoked our indignation. We seem to have forgotten that the courteous and energetic people of Japan have a call on our sympathy and understanding, no less than the pleasant and hard-working people of China. Both are victims of the play of Power Politics, a substitute for which all reasonable people of the world are trying to find. The signing of a new treaty with Japan, in which that which is right under the circumstances is incorporated, would give the Japanese people the encouragement and understanding they need to bring them more in line with international standards.

It could not be harmful to the Chinese people for us to reach an accord with Japan in which our influence in China would not only be maintained but strengthened. If we believe our influence in China is good for the Chinese, and there can be no question about that, let us see to it that we maintain and strengthen that influence.

From the humanitarian standpoint, therefore, as well as from the political and economic standpoints, America's wisest way is the way of the Conference table, and with that the re-establishment of trade-treaty relations with Japan. In no other way would peace be so well secured; trade so satisfactorily advanced; the ideal of good neighborliness so greatly furthered—and the extension of our cultural and charitable influences in East Asia so well promised. It is the way that will be taken if the smoke-screen of ignorance and prejudice does not block it out.

America's interests lie in reaching an accord with Japan in which our rights and privileges in China will be respected, the special position of Japan on the Asiatic Mainland recognized, and the Chinese people assured of freedom. We could not reach that accord with Japan if we declared an embargo against her.

Readjustment of American-Japanese Relations

(Continued from page 97)

never been indignant over Italy's conquest of Ethiopia. In dealing with the United States, therefore, it may be wise for Japan to avoid politico-metaphysical discussions and to seek rather to demonstrate in concrete terms her objectives in this part of the globe.

The situation between Japan and the United States has been delicate many a time in the past and yet these two countries have maintained friendly relations over a period of more than eighty years. They have done this not out of mere sentimental considerations, but because economically and culturally they have been bound by strong and solid ties. The economic bond between the two countries is especially strong. Japan, who is a big buyer of raw cotton, oil, metals and machinery, is America's third best customer, ranking only behind England and Canada in this respect. Conversely, the sericultural industry in Japan, which supports 2,000,000 households, brings every year to Japan from the United States in terms of current quotations of raw silk, at least two times as much gold as is produced in Japan.

Such economic interdependence of two countries is without parallel anywhere else in the world. And the future of the Pacific is rich with promise. Japan, for her part, therefore, should take a long view of the situation and set out to prove herself a stabilizing Power in East Asia, by translating into action her commitments in the past. In this connection, we may well recall that John A. Bingham, who made substantial contributions to the promotion of friendly relations between the two countries as American Minister to Japan about the time of the Restoration of 1868, reported to the Washington Government that Japan was destined to be "the natural gateway of commercial communication for all Eastern Asia with the United States, and, through the United States, with all Western Europe." It is the firm conviction of the writer that the

United States will also eventually look square in the face of realities in East Asia and will do her best in renewing her friendship with Japan, true to the prediction of the pioneer diplomat.

Washington's Next Move in the Far East

(Continued from page 95)

and the Soviet Union might defeat Japan's armies. They cannot sink its navy. While we can, and must, maintain superiority it should be clear to Japan that we desire no war in the Far East and are not maintaining our fleet for any such purpose. A restoration of more amicable commercial and diplomatic relations would help to convince Japan of this.

Here, then, is the outline of a Japanese-American settlement that seems real enough to deserve consideration. It is submitted in the belief that any effective policy must offer encouragement as well as admonishment to the nation from which concessions are sought. It costs the United States no sacrifice of national interest or national honor. It is consistent with American neutrality. Might it not bring stability to an increasingly important part of an otherwise unstable world? If the Germans had any such opportunity thrust into their hands, it is not hard to image how they would use it. We may have scruples against taking even an imaginary cue from the Wilhelmstrasse; we should be quixotic to ignore a tangible advantage it has let slip our way. We should at least be ready to examine it critically. With peace in Europe apparently a forbidden fruit, we should be grateful for any Far Eastern windfall.

Metallurgy in Japan and the Nickel Bureau

By **NICHOLAS RADFORD**, *Editor Japan Nickel Review*

(*The Japan News-Week*)

FIGURES announced in December by Mr. R. C. Stanley, president of the International Nickel Co. of Canada, Ltd., indicate that the world nickel consumption in 1939 was well above 100,000 tons or more than 100 per cent greater than in 1930. From classified figures printed recently in the *Mining Journal* of London showing the approximate consumption of nickel by countries for 1937, it appears that Japan's consumption during the same period has risen to 8,000 tons. This is approximately 900 per cent over the 1930 consumption in this country.

In other words, the Japanese consumption has increased nearly nine times as rapidly as that of the world. This phenomenon is particularly interesting because the advantageous use of nickel presupposes skilled technical practice together with a knowledge in industry of the fundamentals of metallurgical science.

The *Mining Journal's* figures on the approximate 1937 consumption are:

U.S.A.	..	..	..	40,000
Russia	..	..	..	18,000
United Kingdom	..	..	..	14,000
Germany	..	..	..	9,000
Japan	..	..	..	8,000
France	..	..	..	5,000
Italy	..	..	..	2,500
Austria	..	..	..	2,500
Czechoslovakia	..	..	..	2,500
Sweden	..	..	..	2,000
Other countries (say)	..	..	..	4,000
Total	..	..	..	107,500

Diversified Consumption Sought

To a great extent the increased use of the metal in Japan has been made possible by the activities of the Japan Nickel Information Bureau, a purely technical institution which was established in 1932 for the purpose of providing Japanese industry with technical and scientific knowledge. Meantime Bureaus based on the same idea have been operating in other countries, and the sum of all their activities has brought about the increase of world consumption.

The success of the "Bureau system" over a period of 20 years reads almost like an economic romance. During the World War about 90 per cent of the entire nickel supply, according to estimates, was used for munitions and armament. Production was quadrupled during the war period to supply nickel not only for weapons but for automobiles, trucks, aircraft, tanks, and other fighting equipment. After the Armistice the demand ceased abruptly, due, not only to the conclusion of hostilities, but also to the fact that much of the demand which had existed for peace-time industries was being supplied by salvage from war stocks. Nickel had become a drug on the market.

Faced with the problem of diverting the metal to peace-time industries, the producers adopted a policy of giving to industry the practical benefits of scientific research relating to the product. Engineers working on a carefully organized program of technical research, developed new uses for nickel, incidentally taking advantage of the lessons learned in meeting the extraordinary strains and stresses demanded by the severe war-time conditions. It soon became apparent, however, that the ordinary manner of marketing nickel through metal merchants could not be followed in developing such a highly technical product and that a more direct link between the research worker and the user was needed. Therefore a new system of distribution was adopted, according to which the usual metal merchant's commission was divided into two equal portions,

one of which was applied to the use of technical bureaus that would act more impartially for the interests of the user than could be expected from the merchants.

Producers Finance Research

The system was adopted by a group of nickel producers controlling about 90 per cent of the world's supply, and by 1930 the technical service fund had reached the enormous sum of £50,000 sterling which, if applied to the world consumption of approximately 55,000 tons at that time, was, however, less than £1 sterling per ton of that part distributed by the associated producers. Since 1930, amounts have been added to the fund proportionate to the increase in the consumption of nickel.

The result was the creation of a research department in the nickel industry, branches of which were established and are being maintained at New York and Bayonne, N.J., in America; London and Birmingham in England; Paris, France; Frankfurt a.M., Germany; Milan, Italy; and Brussels in Belgium. The branch in Japan, designated the Japan Nickel Information Bureau, was established several years after the others, with phenomenal success, as attested by the following brief historical outline.

Program Proves Effective

Nickel production immediately showed the effect of this program, increasing as indicated by the curve in the accompanying chart. The success in diversifying nickel consumption has been equally complete. The statistics announced by Mr. Stanley last month reveal that, as compared with the 90 per cent consumption for armaments in 1914-18, the consumption for 1939 was distributed approximately as follows:

	Per cent
Steels	60
(Constructional Steels, Stainless Steels and Other Corrosion and Heat-Resisting Steels, and Steel Castings).	
Nickel Cast Iron	3
Nickel-Iron Alloys	1
Nickel-Copper Alloys and Nickel Silvers	10
Nickel Brass, Bronze and Aluminum Alloy Castings	2
Heat Resistant and Electrical Resistance Alloys	3
Monel, Malleable Nickel, Nickel Clad, Inconel	10
Electrodeposition	8
Non-Metallic Materials for the Chemical Industry	1
(Nickel Salts, Ceramic Materials, Storage Battery, Materials and Catalysts).	
Miscellaneous and Unclassified	2

Results achieved up to 1930 from the bureaus in America, England and Europe were such that it was decided to undertake an industrial survey of Japan to determine whether the industries here were sufficiently developed to take advantage of the use of high-powered alloys. The survey disclosed that Japanese industries were indeed highly advanced in almost every phase of development except the uses of such alloys, and that their backwardness in this one respect was a natural consequence of economic conditions peculiar to the country.

Japan Bureau Considered

Early in 1930 Mr. James A. Rabbitt, Consulting Engineer for the International Nickel Company, came to Japan and conferred with



James A. Rabbitt, Organizer and Director of The Japan Nickel Bureau

several educational leaders and scientists regarding the advisability of establishing a Nickel Information Bureau here. In particular he requested Dr. Bunji Mano, who was about to leave for London to attend a session of the Inter-Parliamentary Congress and the International Commercial Congress, to investigate the work of the Nickel Information Bureau in London.

Dr. Mano visited the Research Laboratory of the Bureau of Information on Nickel, at Birmingham, and made a thorough investigation of its work. Upon his return to this country he reported to such authorities as Dr. Kotaro Honda, Viscount Tadashi Inouye, Dr. Masao Kamo, and Dr. Benzo Katsura, that a bureau would be of benefit to the industries of Japan.

Mr. Rabbitt, was in Japan at that time, and with the encouragement of these men he visited England and America and recommended that his principals establish such a bureau in Japan. This they agreed to do, and retained Mr. Rabbitt as an adviser to come to Japan and organize the Bureau.

Announcement of the project in America was made by Mr. Rabbitt in the course of an address before the executive committee of the Japan Society of New York at a luncheon January 27, 1932, and it attracted widespread attention in the American press. Incidentally the other guests of honor and speakers on that occasion were the Japanese Consul-General at New York, Mr. Kensuke Horinouchi, now the Ambassador to the United States; and Dr. J. A. L. Waddell, the noted engineer who was formerly a professor at the Imperial University, Tokyo. The *New York Times* of the following day quoted Mr. Rabbitt as saying in his address that "The spirit in which we establish the Japanese Bureau of Information on Nickel is essentially respectful and it is expectant of a real interchange of scientific theory and technique of learning as well as teaching in a mutual advance of metallurgy."

Opened in 1932

"That this new adventure in international co-operation should come at a time when business the world over is prone to be timid, self-centered and nationalistic demonstrates that there are men, both here and in Japan, who have faith in the future of international commerce and are therefore prepared to work together for its advancement."

Mr. Rabbitt returned to Japan in May 1932 and began organizing the Bureau, which was opened July 12 at the offices in the Municipal Research Building, which it has since occupied. The project received the support of the leading educators and scientists, and the following became Honorary Advisers:—

Dr. KOTARO HONDA: Member of Imperial Academy; President, Tohoku Imperial University; President, Institute of Metals, Japan.

Viscount TADASHIRO INOUE: Member, House of Peers; Past President, Mining Institute of Japan; Local Chairman, American Institute of Mining and Metallurgical Engineers; Ex-Minister of Railways.

Dr. MASAO KAMO: Professor Emeritus, Tokyo Imperial University; Hon. Member, American Society of Mechanical Engineers; Member, Institution of Mechanical Engineers (London); Past President, Society of Mechanical Engineers, Japan.

Dr. BENZO KATSURA: Professor Emeritus, Tokyo Imperial University; Past President, Mining Institute of Japan.

Dr. BUNJI MANO: Privy Councillor; Professor Emeritus, Tokyo and Kyushu Imperial Universities; Member, Institution of Mechanical Engineers (London).

Viscount MASATOSHI OKOCHI: Member, House of Peers; Director, Institute of Physical and Chemical Research; President, Society of Precision Machinery; Past President, Japan Ordnance and Explosive Society.

Dr. DAIKICHI SAITO: Professor Emeritus, Kyoto Imperial University; President, Iron and Steel Institute of Japan.

Baron CHUZABURO SHIBA: Member, House of Peers; Advisory Counsellor, South Manchuria Railroad Company; Past Director, Aeronautical Research Institute of Japan.

Dr. KUNIICHI TAWARA: Member of Imperial Academy; Professor Emeritus, Tokyo Imperial University; Past President, Iron and Steel Institute, Japan.

Honorary Counsellor

Dr. JOJI MATSUMOTO: Member of Imperial Academy; Member, House of Peers; Ex-Minister of Commerce and Industry.

Four Objects of Bureau

This original Board of Honorary Advisers, with the exception of Baron Shiba, who died in 1935, has since continued to give freely and without compensation, their time, experience and advice in order to support the Bureau in carrying out its objects of disseminating important scientific and technical data and research relating to nickel, nickel products and their application to industry for the economic advancement of this country's industries. In

1938 a technical committee was formed with Dr. Benzo Katsura as chairman. It consists of the most active members of the Faculties of Engineering at the Tokyo, Kyoto and Tohoku Imperial Universities, namely Drs. Tokushichi Mishima of Tokyo, Hideo Nishimura of Kyoto and Torajiro Ishiwara of Sendai; together with a group of prominent metallurgists and assisted by the staff of the Bureau.

Briefly stated, the four main objects of the Bureau are: (1) to place at the disposal of industrialists the result of exhaustive researches carried out by the research laboratories maintained by the producers of nickel; (2) to make accessible to engineers and workmen the specific technical data and other information necessary to facilitate the fabrication of nickel and nickel alloys; (3) to improve the properties and perfect the conditions of use of nickel alloys previously employed by industry; and (4) to create and justify economically new applications of nickel and its alloys. Its activities to those ends can be classified generally under the three headings of technical service, publication service, and library service, all of which are provided gratis.

The technical service is the organization's most direct link with both industry and science in Japan. For industry it is a sort of "trouble-shooter." An industrialist who encounters any problem relating to nickel and its alloys may consult the Bureau, where the question is handled by specialists.

The technical specialists also are in direct contact with metallurgical science in Japan.

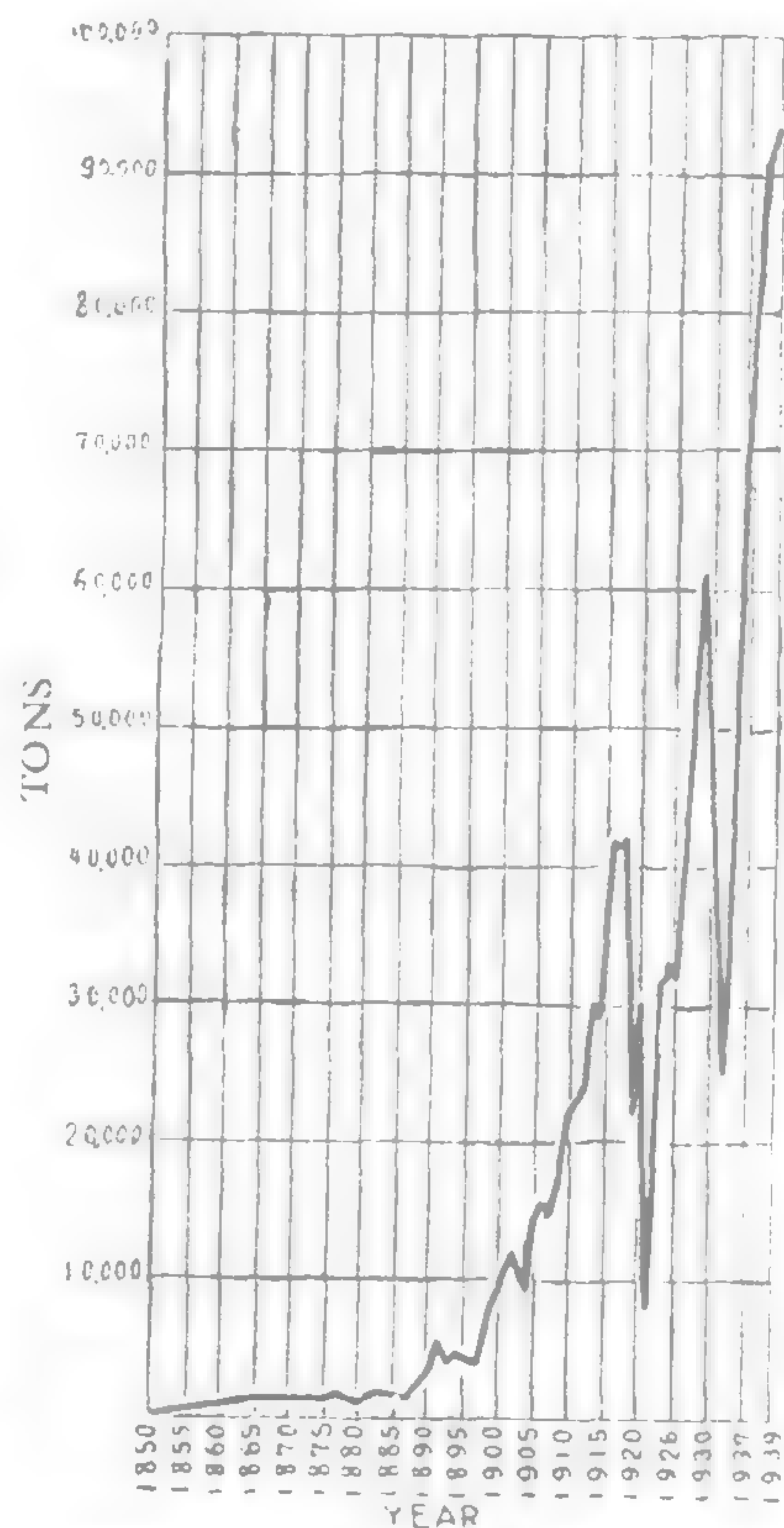
Here they co-operate by consultations or lectures with engineering groups, societies, schools or colleges in drafting scientific articles for publications on nickel and its alloys.

Japan Nickel Review

The Bureau's technical publications are the means by which scientific data and technical instruction have been imparted to Japanese industry. Perhaps the most widely known publication is the *Japan Nickel Review*, a magazine issued quarterly and now entering upon its eighth year, which is a medium for the publication and discussion of scientific developments in nickel metallurgy.

An equally important class of publications are the technical pamphlets. These consist mainly of three series, designated A, B and C and devoted respectively to the economical application of nickel in industry, technical information on the alloys, and working instructions for the production and fabrication of the alloys. The three series are being issued in accordance with a program laid out by Mr. Rabbitt when the Bureau was established, on the basis of the requirements of Japan's various industries.

An interesting fact about the publication is that they are all bilingual, that is, printed in both English and Japanese. The two texts appear side by side on each page, paragraph against the



World's Nickel Consumption, 1850 to 1939

corresponding paragraph. One advantage of this system has been the provision of an English "reference text" for the Japanese reader in cases where highly technical terms have not yet become standardized in the Japanese language.

A characteristic feature of the Japan Bureau is the metallurgical library that it has built up and which now contains more than 5,000 volumes with more than 155,000 indexed reference cards. This library has proved of particular value because the scientific publications in the European languages are not as easily accessible in Japan as in the Occidental countries.

Many Inquiries

The manner in which the Bureau's activities have been received testifies to the extent of the demand for them. Up to this year a total of more than 125,000 inquiries have been received and handled, including general as well as strictly technical inquiries. For the past three years the Bureau has given metallurgical service to 77 engineering societies.

More than 150,000 copies of the 27 issues of the *Japan Nickel Review* have been distributed, these issues comprising 3,940 printed pages of text. The number of pamphlets and text books published is about 120, of which more than 151,000 copies have been distributed. It has been necessary to issue second and third editions of more than half of the basic technical pamphlets, and the demand for some has been so great that the third editions have been exhausted and fourth printings are now being prepared. The distribution of all publications, even the *Japan Nickel Review* has been almost entirely against specific requests. The gross distribution of all items, including announcements of newly issued publications and binders, is in excess of 1,199,000.

In the files of the Bureau there are more than 10,500 letters of appreciation from those who have received the benefit of its technical services.

In accordance with the non-profit making basis on which the Bureau was organized, all of its services are given gratis. Consequently it is able to maintain an exact scientific balance in its relations to industries as well as in its relations to the suppliers of the materials regarding which it is consulted.

Materials Conserved Here

As pointed out by Mr. Rabbitt in one of his lectures at the Imperial University at Sendai, it is a principle of industrial economics that "where labor is cheap and material scarce, as in Japan, labor will be wasted and material conserved; whereas in countries where labor is expensive and material is cheap, as in the Occidental industrial countries, labor will be conserved and material used freely." This tendency to conserve materials made industry here slow to adopt the new alloy materials being developed, which were being rapidly applied to industry in the West. Provision of the necessary scientific data and technical instructions by itself, however, would not have been sufficient to bring about the tremendous increase in the consumption of nickel that has taken place here since 1930. Intelligent recognition by Japanese industry of the advantages that were possible, and the skillful use of the data and instructions that were supplied were of course essential.

Japanese scientists were quick to see that their nation's industry would have to adopt the same high strength and light weight alloys used abroad, if it hoped to continue meeting world competition. The industrialists, however, did not generally realize this condition until after 1930. Meantime the advance of the nation's modern industrial civilization had created a domestic requirement for higher speeds in transportation as well as other fields, and the high power light weight alloys were essential to supply the increased speed.

Japanese Research Famous

Japan's delay in adopting alloys was not due to the backwardness of its metallurgical science, for much has been accomplished here in that field. Dr. Kotaro Honda and his staff at the Tohoku Imperial University, for example, have carried out research relating to metals that is recognized internationally, and have led the world in the discovery and development of the K.S., permanently magnetic steels. Dr. Tokushichi Mishima's famous M.K. nickel-aluminum magnets have revolutionized air travel by the improvement which

they have effected in magnetos. As stated by Dr. Honda in one of his editorials for the *Japan Nickel Review*, there was a great gap between the laboratory work in Japan and its successful application to industry and the Japan Nickel Information Bureau has been an important factor in bridging this gap.

It is interesting to note incidentally that the knowledge of alloying metals in this country is extremely ancient. The Daibutsu at Nara, for example, which was cast nearly 1,200 years ago at a time when Europe was in the dark ages, is made of an alloy containing 1,154,097 lbs. of copper, 20,385 lbs. of white metal, 4,866 lbs. of mercury and 966 lbs. of green gold. This alloy, however, was and is static, reflecting the state of the Buddhistic civilization existing at that time.

Sword Made of Alloy Steel

Six hundred years later, about the middle of the fourteenth century, the production of the famous Nambu cast iron kettles was developed as an industry in Japan. The steels used in the swords made by Ryokai, Muramasa, Namihara and Hirosada, famous smiths who lived between the fourteenth and seventeenth centuries, were alloy steels containing nickel and various other elements.

It is difficult for the layman to realize the extent to which the world's contemporary high speed civilization depends upon alloy materials. These materials have made possible the construction of the streamline train, the high powered, high speed automobile and airplane and countless other appurtenances to modern life. The use of alloy materials is adjusted to the particular purpose for which they are employed. In some cases only increased strength with hardness or light weight may be required; in others it may be necessary to provide electric resistance, resistance to heat and corrosion, or a particular combination of those properties; while again beauty of appearance may be the property mainly desired. The metallurgist, like the physician with his remedies, studies the particular case and prescribes the alloy or alloys that will be most suitable.

The action of alloying elements on metals would have been regarded in ancient times as belonging to the realm of magic.

The principal alloying elements are:

For Strength, Toughness, Hardness Nickel, Chromium, Molybdenum Vanadium and Manganese.

For Electric and Heat-Resistance.. Nickel, Chromium and Iron.

For Resistance to Corrosion from Acids, Salts, and Alkalies .. Nickel, Chromium and Copper.

For Lightness with Strength .. Nickel and Aluminum.

There are so many different combinations of these alloying elements that it is almost impossible to list them, and new alloys are constantly being developed. Among all of the alloying elements, however, nickel is used the most extensively because of its solubility with other metals at high temperatures—a solubility which has been compared to that of sugar in water—and also because it imparts its own desirable properties to any metal with which it may be combined, while at the same time raising the quality of the resultant alloy. This may be responsible for the phrase that "nickel is to industry, as salt is to food."

In 1903 the consumption of nickel was practically limited to four major items in industry, that is, to plating, nickel silver, coinage and nickel steel (the latter used principally for military purposes). The 1940 consumption includes 13 major items, as follows:

(1) Nickel Alloy Steels—For Automobiles, Aircraft, Marine Engineering, Power Equipment, General Machinery and Ordnance.

(2) Nickel Alloy Cast Iron—For General Machinery of all Kinds.

(3) Ferro-Nickel Heat and Corrosion Resistant Alloys—For Furnace Parts and Chemical Equipment.

(4) Nickel-Chromium Electric Resistance Alloys—For Resistance Elements in Electric Heating Devices.

(5) Nickel Plating—For All Services including the base for Chromium Plating.

(6) Nickel Catalysts—For The Hydrogenation of Fatty Oils.

(7) Monel and Stainless Steel—For Food Equipment, Chemical and Dyeing Apparatus.

(8) Malleable Nickel—For Radio and Telephone Equipment.

(Continued on page 108)

Improvements at the Port of Rangoon

(The Dock and Harbor Authority)

RANGOON, which has a population of a little over 400,000, is the capital and chief commercial port of Burma. It is situated on the Hlaing or Rangoon River, about 20 miles from its entrance into the Gulf of Martaban, and just above its confluence with the Pazundaung Creek and Pegu River. The Rangoon River is an eastern branch of the Irrawaddy River, which extends for more than 1,200 miles into the interior. At Rangoon the river is some 800 yds. wide, and the foreshore of the harbor extends over 7,200 yds., of which about two-thirds have been developed for port shipping purposes. The inner harbor has a maximum tidal range of about 22-ft., and a depth of 21-ft. at low water. Access to the Harbor requires to be maintained by dredging. The depth of water on the bar is 28-ft. at H.W.O.N.T. and 34-ft. at H.W.O.S.T.

Rangoon now handles over 90 per cent of the total overseas trade of Burma, and in order to deal adequately with the steadily growing volume of goods and traffic passing through the port, the necessity of increasing and modernizing the wharfage accommodation has been under consideration for a number of years past, and a comprehensive program of port development, estimated to cost about £2,000,000, was adopted in 1925. Apart from certain reclamation and development works, the first stage of the scheme was the construction of the Strand Market Wharf, 509-ft. long and 40-ft. wide. This wharf which joined up the former Sule Pagoda and Latter Street Wharves, was completed in 1930. It is constructed of reinforced concrete, the front portion being carried on two rows of reinforced concrete cylinders of the bell-mouthed type, 7-ft. in diameter, with bases 10-ft. in diameter, the superstructure having a deck of ordinary beam and slab construction laid on shuttering. The back area of the wharf is carried on 75-ft. piles, and has a concrete deck and modern transit sheds.

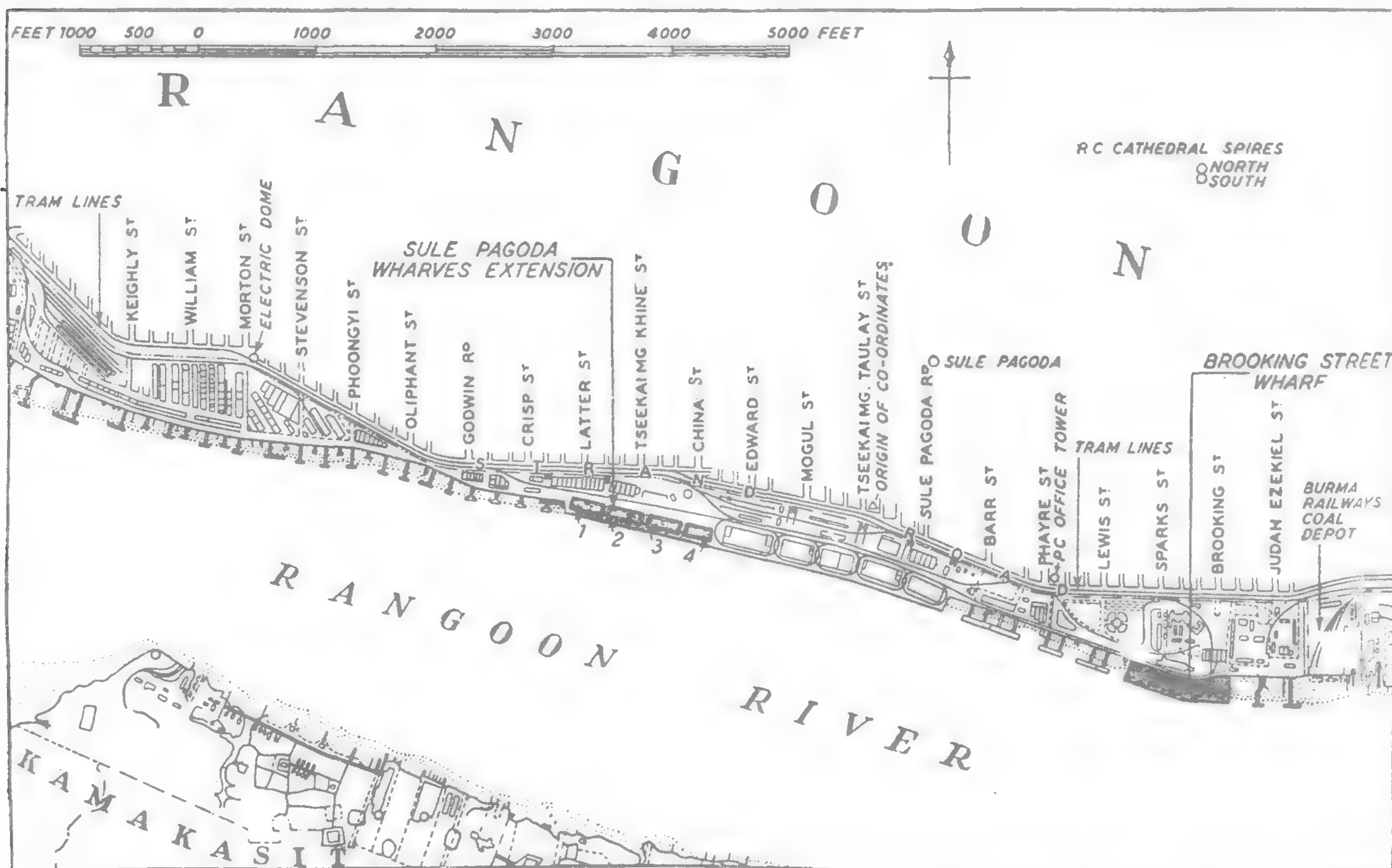
Brooking Street Wharf

The completion of the Strand Market Wharf marked a definite stage in the Port Commissioners' program of Port development and reconstruction, and the succeeding years of economic depression led to a postponement of major works, though a further step forward was achieved by the construction, in 1933, of the deep-water pontoon berth for sea-going vessels at Barr Street: this berth was subsequently equipped to form the Port Health Station, and was opened by His Excellency Sir Archibald Cochrane, G.C.M.G., K.C.S.I., D.S.O., Governor of Burma, on February 3, 1937.

In October, 1934, the Commissioners decided to proceed with the construction of a new two-berth wharf at Brooking Street to replace the old screw-pile jetty built in 1882, and the Chief Engineer was instructed to prepare plans and estimates for the work.

The preliminary investigation of the site included an extensive series of borings to ascertain the nature of the soil below the river bed. Three screw cylinders were put down as a trial, and were subjected to load tests. The design adopted for the wharf was based on the information derived from these investigations, and, following discussions with the Commissioners' Consulting Engineers, Sir Alexander Gibb and Partners, Westminster, to whom the proposals were submitted for approval, and to whose assistance and collaboration the Commissioners are indebted, a detailed scheme was approved and the plans and estimates sanctioned on May 5, 1937.

The old wharf provided only a single berth. With its sheer-legs, it formed a familiar landmark to passengers arriving in Rangoon by sea. It was originally 362-ft. in length, but was subsequently reduced to 276-ft., and when, after being 55 years in commission, it was dismantled in 1937, it had reached the end of its economic life.



Plan of portion of the Port of Rangoon showing the site of wharves which have been, and are being extended and modernized

The new wharf, which covers the site both of the old Brooking Street Wharf and of the former jetty at Sparks Street, is 900-ft. in length, and the wharf structure proper has an average width of 190-ft. It provides two berths, each 450-ft. long, capable of accommodating the largest types of sea-going vessels normally using the port. The wharf is constructed throughout in reinforced concrete. A minimum depth of 25-ft. is available at low water.

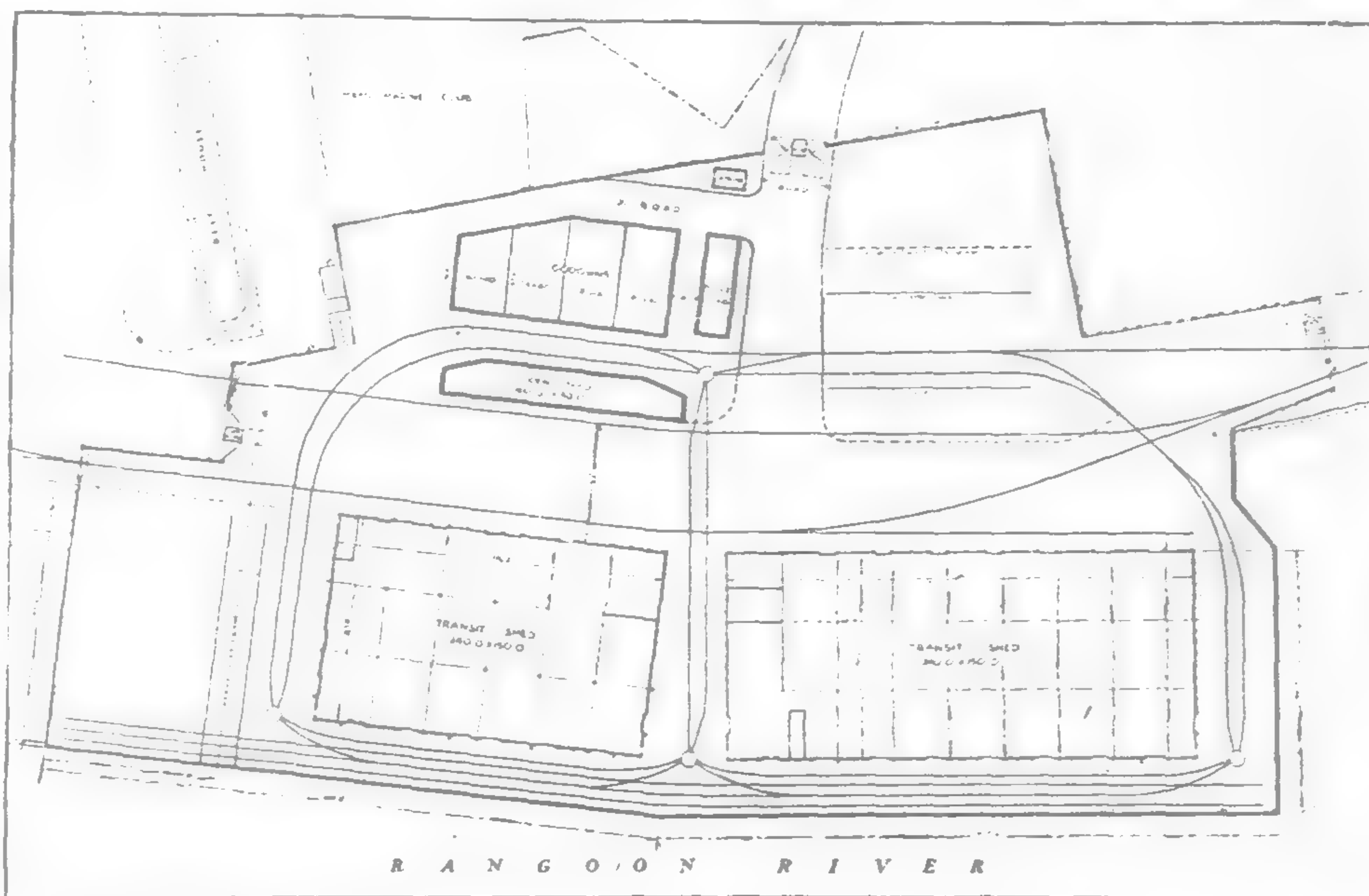
Screw Cylinders

The front portion of the wharf is carried on 150 screw cylinders, 3-ft. 6-in. in diameter in three rows, penetrating to depths of from 40 to 45-ft. below the river bed. At the base of each cylinder is a heavy cast-iron screw, 8-ft. in diameter, the purpose of which is both to facilitate screwing and to distribute the load at the foundation level; the cylinder itself consists of a thin steel shell which, after being screwed down to the required level, is reinforced with steel rods and filled with concrete, thus forming a substantial foundation to carry the heavy wharf superstructure. The maximum load to which each screw-pile is subjected is 230 tons. Test cylinders were driven and loaded to this degree, and showed that the foundations were entirely suitable to take the load. The supply and putting down of these cylinders was carried out by the Braithwaite, Burn and Jessop Construction Company, Limited, and it is of interest to note that this is the first occasion on which screw cylinders of this type have been used for wharf construction. The heavy gantry and equipment for the screwing of these cylinders travelled on a substantial temporary piled staging which was constructed departmentally.

The remainder of the wharf, including the area occupied by the Transit Sheds, is supported on 925 reinforced concrete piles, 18-in. by 18-in., varying in length from 50 to 75-ft. The piles were driven by a bridge carrying two piling cranes, the same apparatus as was used for driving the piles of the Strand Market Wharf in 1930. Some idea of the quantity of materials required for the construction of a work of this nature may be gained from the fact that if these piles were placed end to end they would extend a distance of 10½ miles.

The piles were fabricated and driven departmentally, the whole of the pile-driving being carried out between September, 1937, and February, 1938. The superstructure carried by both the piles and cylinders was also constructed departmentally.

The stone used in the construction of the wharf was granite supplied by Messrs. Osman Mustikhan



Brooking Street Wharf, general plan of new lay-out

and Company, and brought by rail from their quarries at Mokpalin.

Satisfactory sand was obtained from Kyatkon; the contractors were Ahmed Khan and S. Mudaliar.

Rapid hardening cement from England was used for the reinforced concrete work.

Transit Sheds

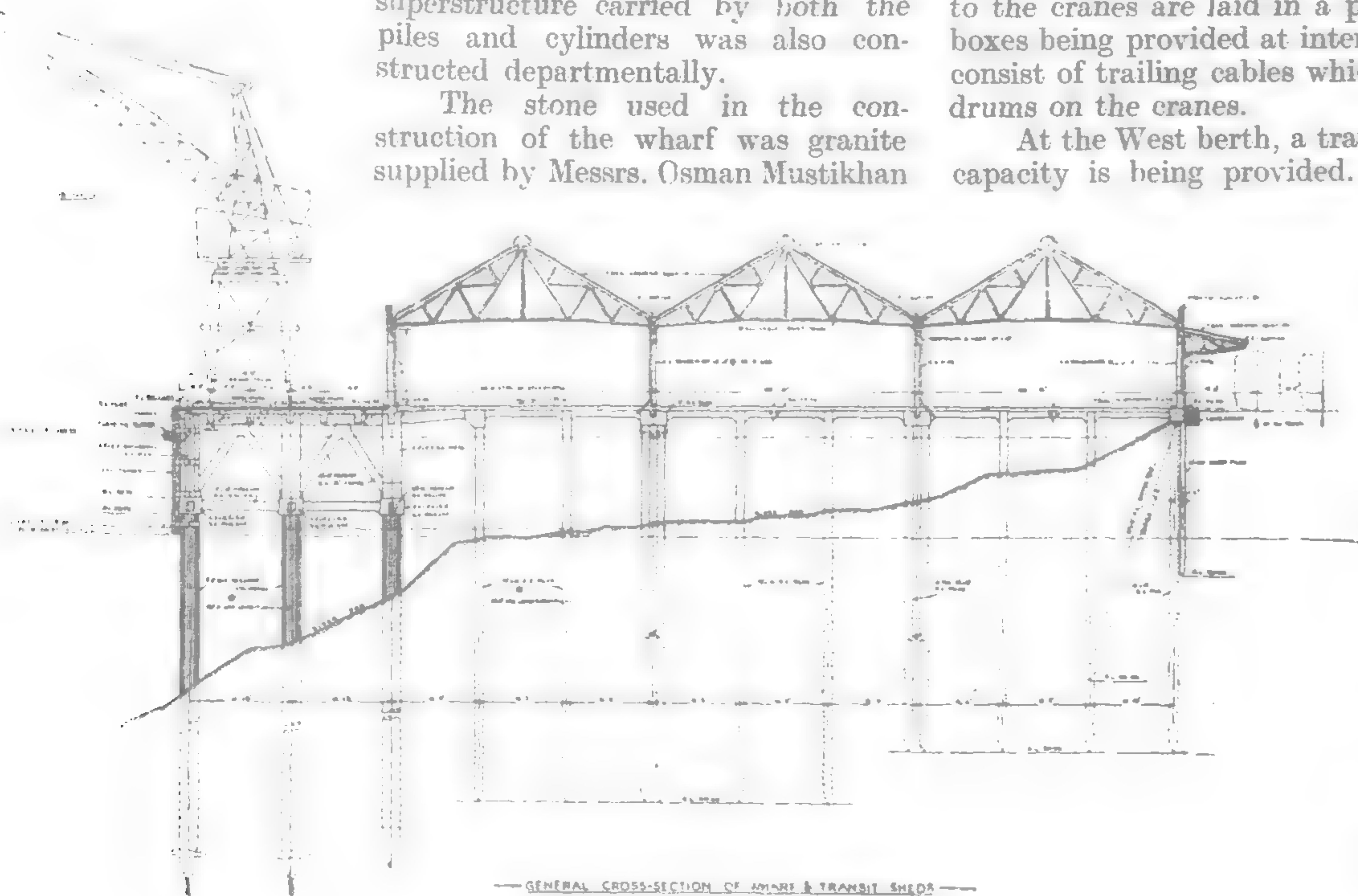
The wharf carries two single-storied transit sheds, that at the West berth being 240-ft. in length, with a floor area of 36,000 sq. ft., and that at the East berth 340-ft. in length, with a floor area of 51,000 sq. ft. Both these sheds are 150-ft. wide, the roofs being in three spans of 50-ft. The sheds are of steel frame construction, with masonry walls; the roof is of asbestos cement sheets, with glazed panels providing ample lighting along the north slope of each bay. Continuous roof ventilation is provided, and additional ventilation is furnished along the north wall, where external canopies give weather protection to vehicles loading cargo from the sheds. The doors are of the roller-shutter type.

The crane equipment on the wharf-head consists of eight 1½-ton portal electric cranes travelling on a track of 15-ft. gauge. Four cranes are provided for each berth. The cables supplying power to the cranes are laid in a pipe conduit below the decking, plug-boxes being provided at intervals for the crane connections; these consist of trailing cables which, when not in use, will be coiled on drums on the cranes.

At the West berth, a travelling portal electric crane of 40 tons capacity is being provided. This crane will travel on a track of 25-ft. gauge at right angles to the face of the wharf, enabling heavy loads to be lifted from a vessel's hold and transferred direct either to road vehicles or to wagons on the railway track at the north side of the transit sheds. The weight of this crane is 360 tons without load, or 400 tons when carrying its maximum lift, and the portion of the wharf on which it will travel has been specially designed to carry this heavy load.

Both the 1½ ton cranes and the 40-ton crane have been specially built for the Commissioners by Messrs. Stothert and Pitt, Limited.

A 10-ton electric transporter crane is provided behind the east transit shed to facilitate the



— GENERAL CROSS-SECTION OF WHARF & TRANSIT SHEDS —



View from river of west end of Brooking Street Wharf

handling of cargo to be stacked in the open. This crane can serve both the trolley-lines and railway sidings.

Rail Facilities

On the wharf-head a system of trolley-lines and turntables is provided, connecting with the layout of trolley-lines and sidings in the yard area.

Railway sidings are provided in the yard area, connecting with the Burma Railways' Suburban Line on the west at Phayre Street, and on the east near Judah Ezekiel Street. There is also rail connection along the foreshore between the new wharf and the Sule Pagoda wharves.

Buildings in the yard area include a single-storied office to accommodate the Traffic Staff; an open shed for the storage of cargo; and four steel-frame Godowns.

Gate offices and shelters have been erected at the three gateways. Of these, the main entrance to the wharf is at the west end, at the foot of Sparks Street. Exit gates for cargo only are provided on the north, leading to Brooking Street, and at the east end of the yard leading to Judah Ezekiel Street.

Approximately 118,000 sq. ft. of new metalled roads have been constructed and tarred, providing ample space for vehicular traffic in the wharf area; and surface and underground drains have been provided to meet the worst conditions during the monsoon.

The wharf was formally opened by the Governor of Burmah on March 31, 1939, in the presence of a gathering representative of all communities in Rangoon. The s.s. *Talamba*, which berthed at No. 2 berth on April 10, was the first vessel to discharge cargo at the new wharf.

The estimated cost of the whole scheme was Rs. 52,00,000; it is anticipated, however, that the final cost will show a substantial



Interior view of west transit shed, Brooking Street Wharf



Sule Pagoda—test cylinder No. 3



General view of Brooking Street Wharf during construction



View of travelling bridge at Brooking Street Wharf, carrying two piling frames. The same equipment was used at Strand Market Wharf in 1930

saving. The result has fully justified the Commissioners' decision to undertake the construction of the wharf departmentally.

With the exception of the screw cylinder foundations which support the wharf-head, the whole work of construction has been carried out by the Commissioners' own Engineering Staff, under the direction of the Chief Engineer, Mr. W. D. Beatty, B.A., B.A.I., M.INST.C.E., who was primarily responsible for the design and execution of the scheme. Mr. F. S. Maconachie, M.INST.C.E., was the Resident Engineer in direct charge of the work.

With the completion of the two berths at Brooking Street, the port will possess three berths designed and built on the most modern lines, and furnished with up-to-date equipment. This undertaking, together with the further program of wharf construction in view, justifies the claim that the Commissioners are keeping abreast of the times and providing those modern facilities which are essential to the sea-borne trade of the country, and in keeping with the position of Rangoon as the major Port of Burma.

Sule Pagoda Wharves

Upon the completion of the Brooking Street Wharf, the Harbor Commissioners have decided to enter upon the third stage of the harbor reconstruction scheme, which entails the demolition and rebuilding of the Sule Pagoda Wharves. These wharves were formerly known as the Latter Street Wharves, and are berths Nos. 1, 2, 3 and 4, upstream from Strand Market Wharf. The new wharves will have a total frontage of 1,380-ft., with three transit sheds, each measuring 50-ft. in width, and having lengths of 360 ft., 370-ft. and 380-ft., respectively.

The method of reconstruction will be similar to that adopted at Brooking Street, and the cross-section of the wharves are the same excepting that in the case of the Sule Pagoda Wharves the plans have been modified to allow for an existing retaining wall, which was built at the time of the construction of the original wharves.

The wharves will also be equipped with the necessary cranes, eleven cranes of two and three ton capacity being provided for the three berths, as well as loading decks, railway sidings and other facilities for the rapid and efficient handling of cargoes.

Three test cylinders have already been sunk to determine the suitability for the substrata.

These tests have shown satisfactory results with the cylinders loaded to 230 tons.

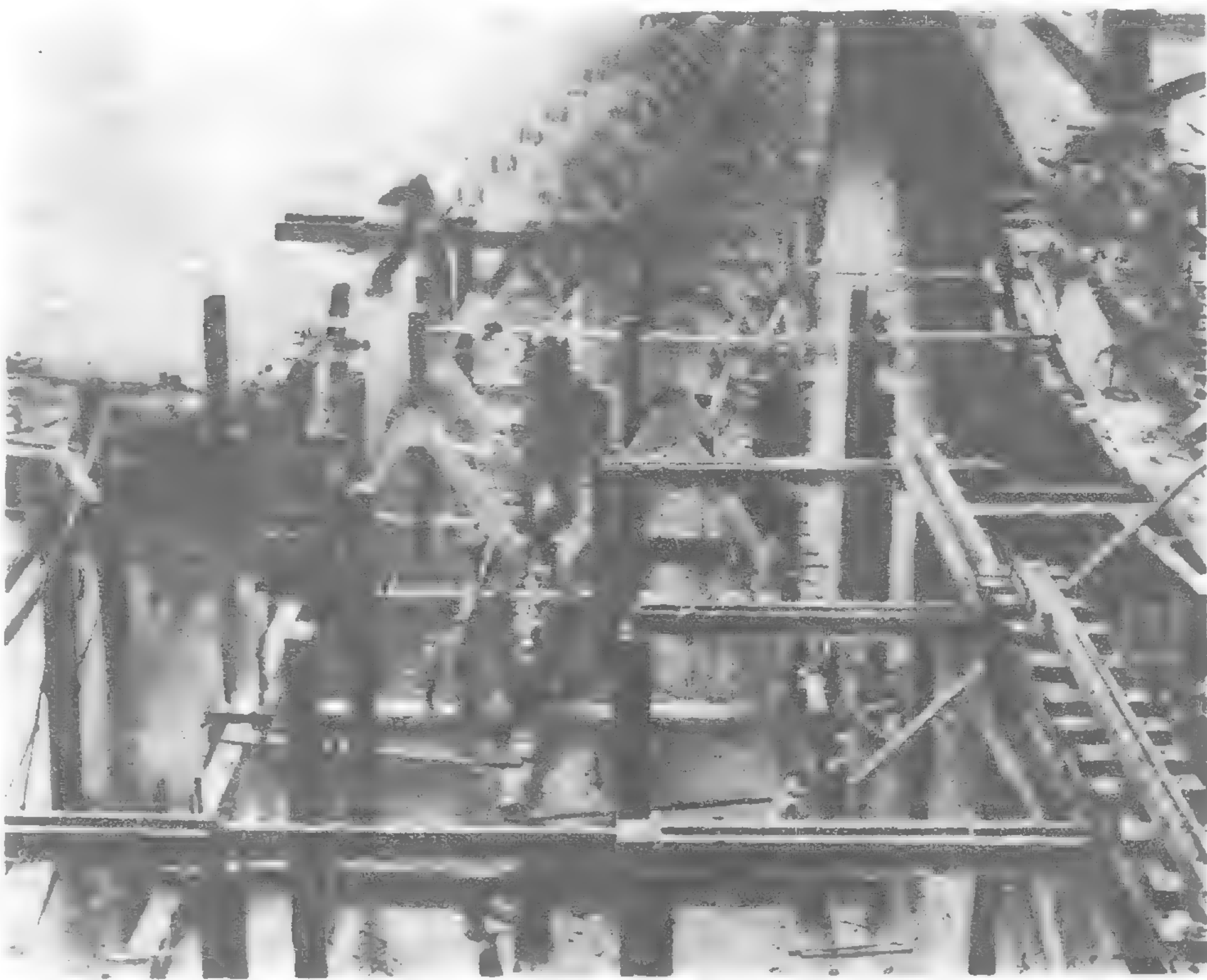
In the case for the reinforced concrete work, it has been decided to use rapid-hardening cement made in Burma.

Further Undertakings

The following are particulars of other new works of a minor character which are still in progress, or have been completed within the last few months.

Lanmadaw Foreshore Development and Improvement.—Work on the reconstruction on the Fish depot, and the erection of four additional godowns in Block C., was completed last year. A reinforced concrete sampan landing stage was constructed at Phongyi Street, and work is proceeding on the reconstruction of Phongyi Street lower pontoon jetty.

Coal Jetty at Kings Bank.—A new timber coal jetty was constructed at Kings Bank



View of front portion of Brooking Street Wharf showing pre-cast "A" frames being placed on "screwcrete" cylinders

during 1938, to replace the coal landing dolphin rendered ineffective by silting.

New Passenger Jetty.—The New Passenger Jetty at Lewis Street, which cost a total of Rs. 1,44,288 (approximately £10,000), was completed and brought into use in May, 1938.

Extension of Godowns.—Recent extensions to godowns A and B at the Mandalay depot, Botataung, provide an additional floor area of 10,000 sq. ft.

Import Salt Depot.—A new screw pile cargo boat jetty, 138-ft. long, has been constructed at the Import Salt Depot, Pagundaung. It was opened to traffic on March 1, 1939.

Trade of the Port

Burma was formally separated from India on April 1, 1937, and since that date the Burmese Government, by concentrating upon improving the facilities for land and sea transport, has fostered and considerably increased both the internal and external trade of the country. Also, there is no doubt that the military operations of the Japanese in China have caused large quantities of war material and other supplies to be diverted from China's seaboard to other avenues of communication, which have been hastily constructed and have their outlets in Burma or Russia.

The country exports a considerable quantity of rice and teak, which comes from the extensive forests of Burma and the Shan States and overland from Siam. In addition, Burma possesses considerable quantities of petroleum, rubies and jade-stone. The imports consist chiefly of cotton piece-goods and yarn, coal, hardware and metals.

The most recent Annual Report of the Commissioners of the Port shows that the imports and exports for the 12 months ending March 31, 1939, amounted to 1,741,136 tons, an increase of 87,077 tons over the previous year.

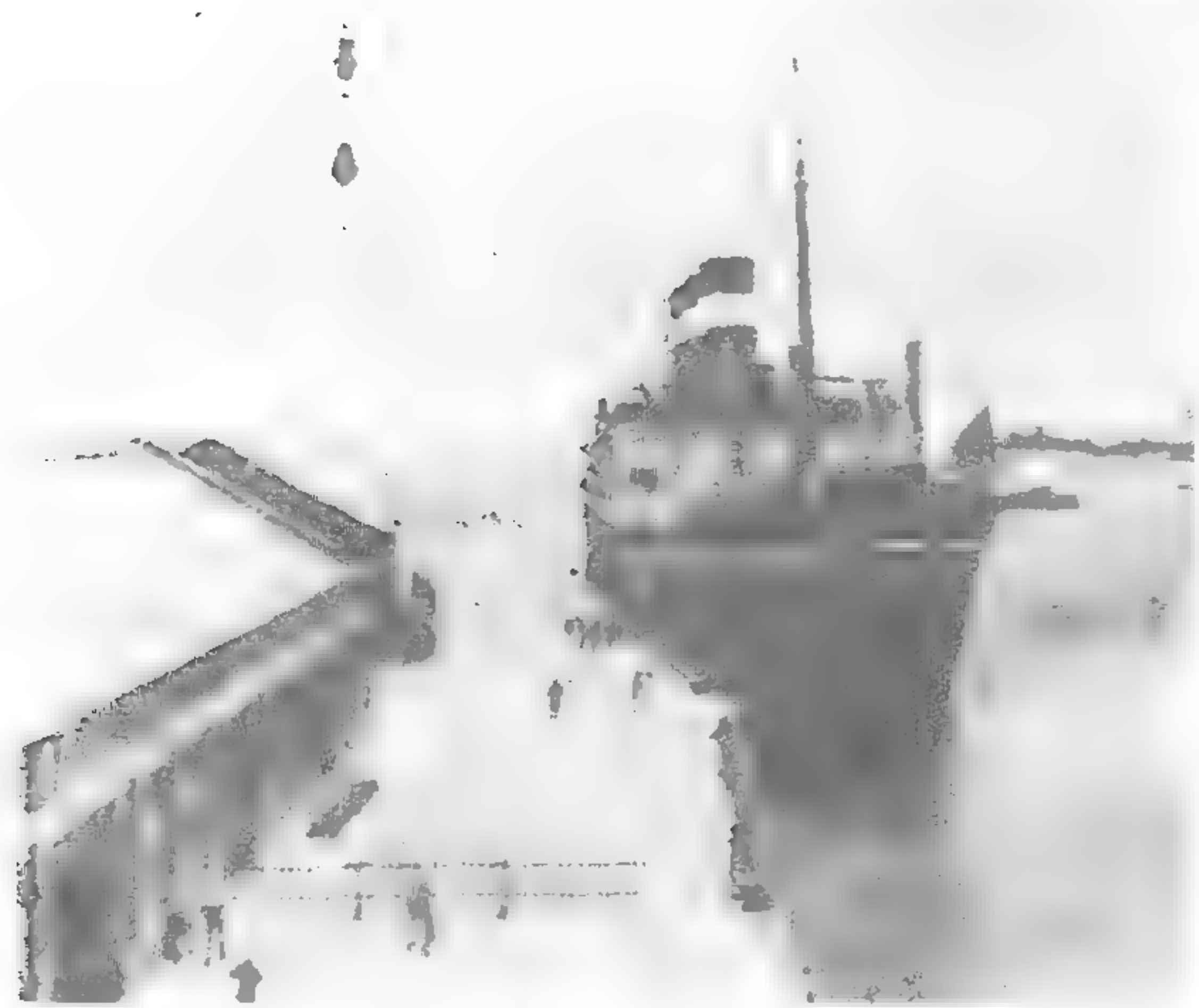
The total sea-borne trade of Rangoon for the past five years, and the proportion



View of fenders

handled over the Commissioners' premises, are given in the following table:—

Description of Trade	1934-35	1935-36	1936-37	1937-38	1938-39
(a) Sea-borne Trade—	Tons	Tons	Tons	Tons	Tons
Imports ..	1,267,685	1,325,546	1,318,869	1,429,175	1,365,873
Exports ..	4,298,672	3,891,056	3,940,173	3,954,231	3,919,662
Transshipment ..	21,782	23,898	29,900	32,606	45,314
Total ..	5,588,139	5,240,500	5,288,142	5,416,012	5,330,849
(b) Proportion handled over Commissioners' Premises—					
Imports ..	641,898 (50.6%)	670,469 (50.6%)	687,014 (52.1%)	697,399 (48.8%)	646,030 (47.3%)
Exports ..	1,142,352 (26.6%)	1,072,000 (27.5%)	1,026,633 (26.1%)	951,131 (24.1%)	1,088,620 (27.8%)
Transshipment ..	2,603 (12.0%)	3,036 (12.7%)	4,679 (16.1%)	5,529 (17.0%)	6,486 (14.3%)
Total ..	1,786,852	1,745,505	1,718,326	1,654,059	1,741,136



S.S. "Talamba," first vessel to berth at the new Brooking Street Wharf

During the year, 193,259 passengers by sea landed at, and 249,334 embarked from, the Commissioners' wharves and jetties, as compared with 220,230 and 221,302, respectively in the previous year.

The total net tonnage of shipping entering the port was 4,311,002 tons, an increase of 200,531 tons over the previous year

Of the 1,584 sea-going vessels that entered, 955 came alongside the Commissioners' wharves and jetties for the purpose of disembarking passengers and discharging cargo, as compared with 963 vessels in 1937-38.

Accounts.—The working for the financial year resulted in an excess of income over expenditure, amounting to Rs. 1,48,033, as against an estimated figure of Rs. 86,690. Compared with the previous year, income shows a decrease of Rs. 1,20,781, and expenditure a decrease of Rs. 1,79,257.

The total income and expenditure during the last five years is shown in the following table:—

	1934-35	1935-36	1936-37	1937-38	1938-39
	Rs.	Rs.	Rs.	Rs.	Rs.
Income ..	75,34,972	72,05,954	72,28,187	70,96,781	69,76,000
Expenditure ..	67,33,811	69,51,709	69,75,689	68,57,224	68,27,967

Metallurgy in Japan and the Nickel Bureau

(Continued from page 103)

- (9) Nickel Silver—For Architectural Ornaments and Fittings.
 - (10) Nickel Coinage—Used in fifty countries.
 - (11) The Edison Storage Battery—For Mine Cars and Other Services.
 - (12) Nickel Brasses and Nickel Bronzes—For Marine Hardware, Propellers, etc.
 - (13) Nickel Aluminum Alloys—Permanent Magnets, Pistons and Piston Rods, for Automobile and Aircraft Engines, etc.
- The research and development work continues to increase, with no well defined horizon.

Malaria in Turkey

TURKEY, which used to be called "the Sick Man," has, under the direction of Kemal Ataturk, become a modern and prosperous State. The number of illiterates there has diminished in a remarkable manner, thanks to the use of Latin characters, introduced on Ataturk's personal initiative. Women no longer wear the veil or trousers; universal suffrage has been instituted, and the Capital Ankara is a model of well-chosen modern architecture.

In the new Turkey, special care has been devoted to questions of hygiene. Under the direction of the Minister of Public Health, which has remained unchanged, this statesman has obtained results that formerly would not have been deemed possible. This fact stands out most clearly, in connection with the fight against malaria. In 1930, there were still vast regions where most of the inhabitants suffered from this malady. On the initiative of the minister, radical steps are now taken for improving this situation. Quinine has been distributed on a large scale, and great efforts are being made to exterminate malaria mosquitoes. The results already obtained enable one to state that Ankara, for example, is practically free from malaria.

The fact that quinine is an excellent curative and preventive remedy for this malady is brought out by the last report of the Malaria Commission of the League of Nations. To prevent malaria, this Commission recommends the taking of 6 grains of quinine per day throughout the fever season. Should an attack have already made its appearance, the malady is dealt with by employing the short quinine treatment: 15 to 20 grains of quinine every day for 5 to 7 days. In this case, it is not necessary to apply additional treatment, but should there be a relapse, the treatment is repeated as before, with the same dose.

On page 124 of its report, issued in 1938, this Malaria Commission stresses the fact that the harmlessness of quinine makes it a suitable drug for administration by subordinate personnel without constant medical supervision, whereas such supervision is essential in the case of synthetic products.

The Yunnan-Burma Railway

CONTRARY to the rumor that the projected Yunnan-Burma Railway has suspended construction, says a Chinese writer, a recent interview with the officials in charge of its construction reveals that the work is proceeding and that they have received no order from the Government to cease.

On account of a great scarcity of man power in the vicinity of the railway, the construction work cannot be started simultaneously along the whole line, which is 860 miles long. To solve the problem it was found more advisable to concentrate all the resources of man power and materials available upon completing first the eastern section of the Yunnan-Burma Railway. If their resources are spread over the whole line, it will be impossible to open the railway to traffic in the near future.

It was further decided that the existing Yunnan-Burma Highway should be greatly improved to carry for the time being the whole burden of international traffic. The Chungking Executive Yuan and the Ministry of Communications were reported to have appropriated a sum of \$12,000,000 for the purpose of making that highway into an all-weather road. Though the rainy season this year did not entirely interrupt traffic, land slides and wash-outs occurred along its western section, each time making the road impassable for a day or two.

The work of improving the highway will further deplete the supply of labor for the construction of the Yunnan-Burma Railway, but the existing route to Burma must be kept constantly open. Whatever resources are still available to the railway are being devoted to completing the eastern section of the line which is expected to open to traffic early in 1941.

Foreign Trade of Philippines is Steady

By RIZAL F. GATICA

PHILIPPINE foreign trade during the first ten months of 1939, for which period figures have just been made available by the Philippine bureau of customs, appears to have not been affected by the present European war as a result of the shifting of trade from European countries to the United States.

The total trade during October, the second month of the conflict, which amounted to P.42,334,206, was well above the total during August before the outbreak of the war and only slightly below the trade during September due to the considerable increase in imports from the United States. The October figures were also considerably greater than the total during the same month in 1938, as a result of the increase in imports.

While trade with the United States showed increase, trade with European countries was hard hit by the war due to difficulties in obtaining shipping facilities. The increasing trend of trade between the Philippines and these countries was thus arrested during the first two months of the war, and the decline undoubtedly continued during the rest of the year which just closed.

However, total trade with European countries in 1939 was still above that in 1938 because of the increase registered during the first eight months of 1939. Trade during the first ten months of 1939 amounted to P.48,666,519 as compared with P.45,221,693 during the same period in 1938, or a gain of 7½ per cent.

The effect of the war on Philippine-European trade may be clearly seen in the fact that trade with Belgium during August, before the outbreak of the conflict, fell from P.270,067 to P.172,139 during October; with France from P.1,070,537 to P.159,756; with Germany from P.1,508,062 to P.632,451 with no exports at all from the Philippines; with Great Britain from P.1,470,087 to P.790,590; Netherlands from P.1,256,825 to P.604,952 and with other European countries from P.1,216,730 to P.704,983. Total trade with all European countries declined from P.6,792,308 in August to only P.3,064,871 in October, showing a drop of 121 per cent.

On the other hand, trade with the United States gained 30 per cent during this same period, the total during August amounting to P.24,719,268 as compared with P.32,178,293 during October. Of the total during October, P.21,396,257 consisted of imports and P.10,782,036 of exports, while during August only P.10,943,560 consisted of imports and P.13,775,708 exports. The considerable increase in imports in October was due to heavy speculative purchases made from the United States by Philippine importers who feared that prices would further rise, and because of the difficulties they encountered to get regular orders from Europe.

During the first ten months of 1939 total trade with the United States was valued at P.280,864,677 as compared with P.312,175,489 during the corresponding period in 1938, or a decline of 11 per cent. The decrease in trade was mainly due to the decline in imports from the United States which amounted to P.123,820,145 in 1939 as compared with P.155,991,617 in 1938. On the other hand, exports to the United States increased only slightly to a value of P.157,044,532 in 1939 from P.156,183,872 in 1938.

The war in Europe has had no effect on the trade between the Philippines and Oriental countries, but the war in China has adversely affected trade between the Philippines and Japan and to some extent the trade with China. Total trade of the Philippines with Oriental countries, including Australia, the East Indies and Kwantung, was valued at P.5,754,243 during October as against P.5,630,190 during August, or a gain of two per cent. During the first ten months of 1939 this trade was valued at P.52,972,865 as against P.63,875,573, showing a decline of 20 per cent, largely as a result of the heavy drop in Philippine-Japanese trade. This trade, however, is heavily in favor of Oriental countries as imports were valued at P.33,861,564 as against exports valued at P.19,111,301 for 1939, and P.44,824,751 in imports and P.19,050,822 in exports for 1938.

Trade with Japan during this same period amounted to P.25,973,725 as compared with P.35,454,350 in 1938, or a drop of 36 per cent. The Sino-Japanese conflict has more adverse effect on

imports from Japan as the figures declined to P.13,058,919 in 1939 from P.23,097,841 in 1938, while exports from the Philippines gained slightly to a total value of P.12,914,806 from P.12,356,509 in 1938.

China which boasts of a population of 450,000,000 and so near to the Philippines buys only a small quantity of Philippine commodities. Total trade with China during the first ten months of 1939 amounted only to P.6,182,636 as against P.7,149,409 in 1938, registering a drop of 15½ per cent. Of this total, P.4,481,345 were in imports and P.1,701,291 in exports during 1939 and P.5,526,956 in imports and P.1,622,453 in exports during 1938.

The total trade of the Philippines with all foreign countries during the first ten months of 1939 was valued at P.394,711,747 as compared with P.431,018,621 during the same period in 1938, registering a loss of nearly nine per cent due to a decline of 18 per cent in the value of imports, largely from the United States and Japan. Despite the decline in trade, however, the Philippines reversed the unfavorable trend in balance of trade in 1938. During the period under review the Philippines has a favorable trade balance of P.15,669,581 as against a negative balance of P.30,705,619 in 1938. Trade with the United States alone has a favorable balance of P.33,224,387, with American possessions of P.916,754 and with "other countries" not named previously in this article amounting to P.1,003,412. These figures were reduced by negative balances with Oriental countries of P.14,750,263, with European countries of P.3,218,197 and with Canada of P.1,506,512.

The figures for the total foreign trade of the Philippines mentioned above do not include exports of gold and silver bullion to the United States and a small quantity to Japan during the period under review. Otherwise, the balance of trade in favor of the Philippines would show a greater amount, although most observers say that foreign investments in the Islands, especially those of American capital; insurance, dividends, shipping and other invisible items would offset this balance in favor of the United States. Gold bullion shipments to the United States amounted to P.58,924,368 in 1939 as compared with P.50,018,974 in 1938, while exports of silver bullion were valued at P.1,421,863 in 1939 as against P.1,009,838. Shipments to Japan were valued as P.188,940 in gold bullion and P.147,544 in silver bullion in 1939 with no exports in 1938.

Philippine foreign trade in 1939 was also featured with the increasing participation of Philippine vessels in the carrying trade of the Islands with the increase of ships to the infant but growing Philippine merchant marine. At the end of 1938 there were only 11 vessels under Philippine registry which took part in carrying trade of the country but in 1939 Filipino companies engaged in foreign shipping made plans to add more ships to their fleets. The De La Rama Steamship Company which has an agency in Shanghai and other Oriental ports, has placed orders for the construction of three motorships of 9,500 tons displacement each in Italy, the first vessels, Dona Aurora, has already been delivered and arrived in Manila last December. The second ship is scheduled to arrive in February and the third in April.

The group of Filipino financiers that recently acquired the ill-fated *President Madison* from the United States Maritime Commission plans to buy additional ships in the near future. The *Madison* which was renamed *President Quezon* in honor of the President of the Philippine Commonwealth sank in Japanese waters while on its way to Manila from Los Angeles, California, where it had been repaired and turned into a freighter.

The Philippine government is interested in the development of a merchant marine in an attempt to develop the foreign trade of the country, especially after independence is granted in 1946. Through the government-owned Philippine National Bank loans involving millions of pesos have reportedly been made to shipping companies to acquire additional vessels and to improve their service.

During the first ten months of 1939 Philippine vessels obtained a share in carrying trade amounting to P.6,862,522 as compared

(Continued on page 112)

Oil and Diplomacy at Saghalien

By MARK J. GINSBOURG

(The Austral-Asiatic Bulletin)

LIKE a gigantic, ragged-edged club, Saghalien hangs over the long string of islands which are Japan. In Russia, Saghalien is known as the "Island of Ill Repute," where thousands of revolutionaries and hardened criminals found punishment and death in Tzarist days. In Japan, Saghalien is known as Karafuto, the island of coal, oil and timber, of ice and snow and of hardy men.

The place has fame as a major bone of international contention, a bone important enough to have led Japan and Russia to threaten war unless their respective rights and claims are respected.

The asset in Saghalien is oil. Apart from the rich fields in the Netherlands East Indies, 6,000 miles away, Saghalien is the only other important oil-producing area in the Pacific. Japan wants this oil for her rapidly growing navy. Russia wants it for her own fleet, as well as for the industrial development of her maritime region.

The Portsmouth Treaty of 1905 split the island into two portions, the northern half remaining Russia's and the southern going to victorious Japan. Most of the oil fields fringe the forbidding eastern coast of Northern Saghalien, to-day ruled by the Soviets. In 1925, Moscow and Tokyo appended to their new treaty of amity a contract of concession, giving a Japanese concern the franchise to prospect and produce in developed and undeveloped oil fields on the eastern coast, and to conduct business incidental to these enterprises. The holder was given the privilege of investigating and prospecting in an area covering 1,000 square Russian miles on the eastern coast for a period of 11 years from December 14, 1925, and of developing 50 per cent of the district where oil was found and production of it assured, for 45 years. Division of the fields was provided under the "checkerboard system," with the Japanese and the Russians developing alternate but not contiguous blocks.

The Japanese concessionaire was permitted to export oil and to import freely all articles necessary for the enterprise, including food for the employees, construct harbors, lay pipe-lines and operate ships, all without charge. On the other hand, she undertook to pay a fixed rate of compensation for the oil produced, to pay taxes, to employ a fixed ratio of Russian workers and to obey Soviet labor laws.

The contract expired in 1936, and a new five-year agreement was drafted after protracted negotiations in Moscow. The political atmosphere in the Pacific was, however, already too tense to permit normal operations. Friction came almost

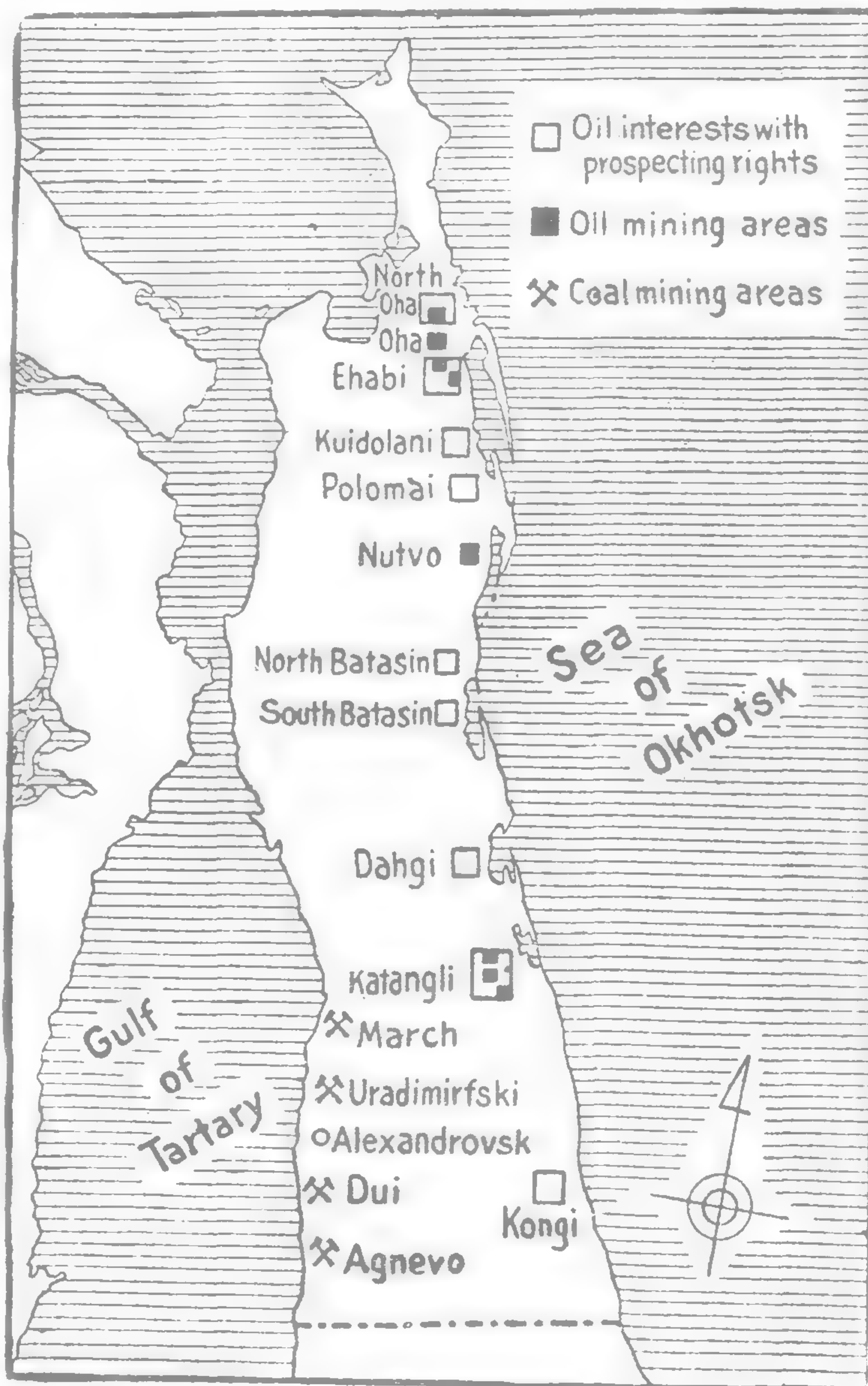
immediately. Japan was entering into the fifth year of her adventure on the Asiatic mainland, and the Japanese Navy was rapidly expanding to "cope with the new situation." More oil was wanted and the Navy was less willing to comply with what it considered as bothersome Soviet restrictions. Russia, on the other hand, was beginning to feel anew her strength after the difficult post-revolutionary years. There was a genuine desire for peace, but also a firm determination not to succumb to Japanese intimidation. Moreover, Russia needed the Saghalien oil herself.

The first Russian hunters and fishermen found their way to Saghalien in 1842. Seven years later, these men discovered that they were on an island and not a peninsula. Probably a decade later, Japanese fishermen from the Hokkaido reached the island and established small settlements. Both claimed the island, and it was not until 1875 that Russia assured herself of possession by ceding to Japan the Kuriles in exchange for a clear title to Saghalien.

Siberia was no longer suitable for exiled radicals and criminals, who found easy ways of returning to European Russia. Saghalien, ice-bound for seven months of the year and separated from the mainland by the stormy and treacherous Tartar Strait, suggested an ideal locale for a penal colony. Thus it was that "Saghalien" became a dreaded word in the Russian language, a synonym for despair, back-breaking toil and death. Thousands of men crossed the channel to the island—crowded like cattle in the holds of the prison ships and guarded by regular troops. Few ever returned home—or escaped.

The Russo-Japanese war of 1904-05 spelled the doom of the penal colony. The Japanese quickly seized the island and held it until the Portsmouth Treaty gave the southern half into their permanent possession.

Oil was first discovered in North Saghalien in 1880, when Russian fur dealers from Nikolaevsk, on the mainland, were told by the natives of dark liquid which had a heavy smell and burned. News travelled slowly in those days. Decades passed before Russian and foreign industrialists learned of the discovery and organized small prospecting parties. The Russian revolution of 1917 put an end even to these half-hearted attempts. But in 1918, an enterprising Russian millionaire named Staheiev—who before the revolution had his finger in every Russian pie—approached another sharpwitted businessman, Fusanosuke Kuhara, with a proposal to organize a large prospecting party. Kuhara—to-day a millionaire munitions maker and leader of the powerful Seiyukai party—was then already



The sketch above shows the geographic distribution of the Japanese coal and oil concessions in the northern half of Saghalien, which is under rule of the Russian Soviets

sufficiently influential to gain the support of the Japanese Navy and Government. In 1919, he organized the Hokushinkai, a company devoted to the promotion of the Japanese oil industry in the Russian half of the island. A party of 200 Japanese workers was immediately dispatched to Saghalien.

Politics, however, interfered. An unprincipled turn-coat, who for the moment vowed allegiance to the Soviets, massacred the Japanese garrison, some 600 to 700 men, in Nikolaievsk, at the mouth of the Amur River. Japan, in retaliation, immediately seized the northern half of Saghalien. In the subsequent five years, until their evacuation in May, 1925, the Japanese shipped out about 22,000 tons of oil, huge quantities of coal and timber and killed off most of the furbearing animals.

In order to get the Japanese out, Moscow resorted to a canny move. The "oil crowd" was still in power in Washington, and the Soviets offered a vast oil concession in Saghalien to Harry F. Sinclair, an Oklahoma oil multi-millionaire and rival of the Rockefellers. In return for the concession, Sinclair agreed to invest 115,000,000 dollars in Soviet oil development, and to use his not inconsiderable influence with President Harding in obtaining American recognition of Soviet Russia. The Japanese, however, remained unimpressed, and when Sinclair's engineers landed in Saghalien to make a survey they were promptly arrested by the gendarmes.

With the oil scandals, which subsequently sent Secretary Fall to the gaol, the United States refused to make an issue of the Japanese move. The concession was allowed to lapse. The Russians were left high and dry, and were compelled to start negotiations with the Japanese which culminated in the comprehensive agreement of January 20, 1925.

The Japanese arm in Saghalien is the Kita Karafuto Sekiyu Kaisha, or the North Saghalien Oil Company Ltd., formed in 1926. The concern is financed jointly by the Japanese super-trusts and is carefully and lovingly nursed by the Navy, whose tankers carry the firm's oil from Saghalien to the storage tanks in Japan. Fittingly enough, the company is headed by a retired naval officer, Admiral Masazo Sakonji, noted for his considerable business acumen and a propensity for belligerent speeches. In April, the Admiral was said by the *Tokyo Asahi* to be telling all those he met: "Just give me two divisions and I'll clear Saghalien of Soviets in no time." He was also quoted as complaining that "everyone knows about the sad state of the Japanese fishermen in northern waters because the fishery issue is making such a loud noise. But the sharp point of the Soviet policy is turned against my poor workers rather than those fishermen." A few years ago, Admiral Sakonji believed in peaceful relations with Russia. Later he advocated the purchase of the Soviet half of the island. More recently, in common with other naval officers, he expressed belief in Japan's destiny to rule the Pacific, and urged the outright seizure of the island.

The company's troubles followed the expiration of the original contract in 1936 and paralleled Soviet-Japanese disputes in other fields. The Japanese-German conclusion of a so-called Anti-Comintern Pact led to a stricter supervision of the Japanese concessions. Hostilities on the Amur River in July, 1937, when two Soviet gunboats were sunk by Japanese artillery, brought a further tightening of restrictions. The "little war" at Changkufeng in 1938 carried relations between the oil company and the local Soviet authorities almost to a breaking point, and led to the Japanese Navy's first ominous warning that it was prepared to take "suitable steps" in defending its fuel sources.

The last two years, in fact, saw an almost continuous succession of disputes, claims, protests and warnings. The last controversy started in June, when the Saghalien Soviet court ordered the North Saghalien Oil and Coal Companies to pay 700,000 roubles, allegedly due in arrears for supplies not provided to Soviet workers in 1937 and 1938. A strong protest was filed in Moscow on July 16 by Ambassador Shigenori Togo, with a demand for a reply within 48 hours. Meanwhile, however, the court fined the oil company 260,000 roubles for failure to pay the required amount, the judgment to be executed by July 19. On July 24, six days beyond the Japanese deadline, the Soviets returned the Japanese memorandum with the comment that it could not be considered by Moscow because it smacked of an ultimatum. A Soviet official statement simultaneously denied Japanese allegations of repressive measures, and accused the oil company of repeatedly violating its labor contracts and other obligations. It was hinted that the firm was importing arms into Saghalien and that its employees were engaged in espionage.

In Tokyo, the spokesman of the Admiralty replied to the Soviet statement with: "The Japanese Navy is determined and prepared to defend Japan's legitimate rights and interests in North Saghalien." Other naval quarters said that the Saghalien dispute was more serious than the contemporaneous fighting on the Outer Mongolian border, because the Japanese naval supplies were vitally affected by the Soviet move. The tension abated in the following week, when the Soviet court indicated that it would not press for the payment of the fine, and when the Japanese oil company started negotiations for a new labor contract providing for salary increases.

Saghalien should be watched as Moscow and Tokyo manoeuvre, for the Japanese Navy still resents the necessity of depending upon Bolsheviks for its oil supplies, and the Soviets do not relish the thought of supplying fuel for the warships of a neighboring Power.

* * *

The conclusion of the Nomonhan truce and the subsequent Russo-Japanese negotiations have failed to bring about any improvement in the conditions in which Nipponese mining and oil concessionaires have to work in Soviet territory in North Saghalien. The profits of these concessionaires amount to almost nothing. The North Karafuto Petroleum Company even will not be able, despite a Government subsidy, to make up the deficit for the current year.

These are statements contained in a report of the Tokyo Cabinet Information Company on conditions in North Saghalien. This issue will continue to play an important part in future negotiations between Moscow and Tokyo. The following details of the report, therefore, are of interest to circles wider than those immediately concerned.

The Japanese angle of view as regards the oil and coal concessions in North Saghalien is explained as follows by the Tokyo Cabinet Information Bureau:

Origin of Rights

The rights and interests in northern Saghalien were first given to Japan as indemnification for the Nikolaevsk Incident of 1920 and later in 1925 at the time of the Peking Treaty, the Soviet Union had to give it formal recognition.

Recent investigations show that the petroleum interests on the eastern coast have an underground deposit amounting to about 300,000,000 tons, while a survey of the mining interests on the western coast brought to light the superior quality of the ore that can be used as raw material for coke in the manufacture of iron.

Both of these interests have proven to be invaluable resources and the Japanese Government is making every effort to protect them.

Soviet Oppression

However, the outbreak of the current China conflict made Japanese-Soviet relations turn for the worse, and the Japanese interests began to feel the Soviet oppression become more severe every year.

In the first place the North Karafuto Mining Company, Ltd., which controls the Japanese mining interests in the district was compelled to give up its business almost entirely, during the Autumn of 1937, when most of the mine workers were forced to return to the mainland, and only a few were left in the galleries of the mines.

This had made it impossible to continue digging in the mines and the result was that the yearly supply of coal to the mainland of about 200,000 tons had to be stopped.

Another case where the Sakai Kumiai was forced to give up all possibility of forming a mining company in northern Karafuto, reveals that this organization had obtained government sanction and was all ready to begin work, but the Soviet oppression made it impossible for them to continue.

Moreover, rumors are that at the mining site in Agnevo, the Soviet Union even tried to take up the Japanese mining interests, in spite of the protests by the Japanese government and now has undertaken a Soviet government enterprise, there.

Oil Concessions

The oil interests, too, have met with unpleasant interference. The North Karafuto Petroleum Company had set up plans for the erection of 35 oil wells for prospecting in the vast area of 1,000 Russian square miles on the eastern coast.

This was supposed to be a five-year plan and the company went as far as to sign a detailed agreement with the Soviet Union as well as to receive government financial aid, and was ready to begin work. But as Soviet-Japanese relations did not become any better, the company was forced to give up this work, although it meant an enormous loss.

Boring Petroleum

The work of boring for petroleum has been going on at Oha and Katanghri on a small scale, but at the new oil fields at Ehabi where the best quality petroleum can be detected, Soviet interference has made it impossible to carry on any work, and the total amount of petroleum being produced has been steadily on the decline since 1937.

But the year 1939 did not turn the tide in favor of the Japanese. So, with the help of the Government they decided to take steps to tackle the oncoming Soviet pressure.

With the approval of the Imperial Diet, the Government allotted a subsidy of ¥6,184,000 to the North Karafuto Petroleum Company and ¥1,124,900 to the North Karafuto Mining Company to make up for the companies' deficit caused by the Soviet oppression and for further careful preparation in consolidating the interests.

But the Soviet pressure did not seem to become moderated and when the Nomonhan fighting broke out, matters became even worse.

Impossible Demands

One of the instances was that regarding the revision of the contract for labor organization. In 1938, there was an increase of 15 per cent in wages, and then, there was a demand for the North Karafuto Petroleum Company to raise this rate to 40 per cent besides making strong and almost impossible demands that any institutions for the promotion of public welfare, such as hospitals, social rooms, etc., which would be erected by the company should be transferred to Soviet hands.

As the Soviet authorities were insistent on their claims, negotiations were delayed for some time, and finally conciliatory measures were taken, and the matter was evaded by a compromise of no specific contract, for the time being.

But the Soviet Union made use of this unsettled situation and using this matter of no contracts, as an excuse, they refused to permit the transporting of laborers into the district.

The North Karafuto Petroleum Company had applied for 2,050 Russian laborers and 860 Japanese laborers, while the North Karafuto Mining Company had asked for 900 Russians and 400 Japanese, but after much delay, in August, 300 Japanese were finally admitted to the Petroleum Company and 150 Japanese for the Mining Company, while there was an absolute refusal to supply any Russian laborers.

Many Fields Close

Needless to say there were several arguments back and forth concerning the question, but the result was that there was a tremendous shortage of labor, and the North Karafuto Petroleum Company had to cease any prospecting work for this year. Besides, the oil fields at Katanghri and Ehabi, have had to close up and only at Oha what little work there is can be carried on.

The North Karafuto Mining Company has given up all hope of continuing its original plans of digging for coal or transporting coal, and is now doing what little it can in the interior of the mines.

The Soviet authorities have not stopped at this stage of the problem. Knowing fully well the trials that the Japanese are going through with lack of labor hands, they have given strict orders that gigantic plans made under the Soviet laws for certain amount of work have to be done by a certain time, and if these orders are not carried out, the Japanese authorities would be blamed.

Moreover, they have even gone so far as to say that it would be a violation of the Soviet law, and they would have the right to forbid the transaction of business of these Japanese firms. They have also put a strict control on the amount of necessary commodities being sent to the laborers for their daily use, making things extremely difficult for the workers.

Suit for Damages

A case came up, where the Soviet Labor Union filed a suit for damages of 370,000 roubles to the North Karafuto Mining Company and 260,000 roubles to the North Karafuto Petroleum Company, and when the matter was handled at the Soviet Court, the authorities would not even pay attention due to the Japanese company officials. Fortunately, the Japanese Government took a firm stand in negotiating it from a diplomatic viewpoint, and settled the matter.

The outbreak of the second European War, the conclusion of the Japanese-Soviet truce at Nomonhan and other changes in international affairs have not caused any changes to be wrought on the Japanese interests in northern Karafuto.

The delay on the Soviet side and the problems lying unsolved offer fresh fuel for worry and the ships of both Japanese companies have had to lie anchored on the shores of Karafuto, battling the storm and dangers of the Okhotsk Sea.

During the latter part of November, further orders for the withdrawal of the managing staff of both companies were given out and new members of the North Karafuto Petroleum Company were refused entrance into the country.

If this withdrawal order should really be enforced, it would eventually mean the giving up of Japanese rights and interests in north Karafuto, and the Japanese Government has been negotiating for a better settlement of the matter. But the Soviet authorities just seem to delay their answer.

Foreign Trade of Philippines is Steady

(Continued from page 109)

with P.2,588,946 in 1938, showing an increase of 165 per cent. Although these figures are considered still insignificant compared with the amount of participation of vessels of other nationalities, they show an encouraging trend in the present development of a Philippine merchant marine. Philippine bottoms have already replaced Panama ships to tenth position and are now closely behind Swedish bottoms which are in eighth place in the trade.

British ships still dominate the trade in the amount of P.132,947,877 as against their share during the ten-month period of 1938 amounting to P.145,195,075. The first month of the European war had an unfavorable effect on British ships but they improved their position in October.

Japanese bottoms have replaced American vessels and are now second in position with a total amount of P.60,424,439 as compared with P.67,426,647 in 1938. Norwegian ships surpassed American vessels with a share valued at P.53,044,887 in 1939 as compared with P.52,313,151 in 1938. Before the outbreak of the war in Europe Norwegian ships registered a drop in their participation of

the carrying trade of the Philippines but their position improved during September and October.

American bottoms which formerly dominated the carrying trade of the Islands because of the fact that the Philippines is an American possession have now been shoved to fourth place with a share valued at P.51,538,539 as against the 1938 total of P.72,471,715. However, their position improved considerably during the first two months of the war in Europe and may further increase their participation in the coming months.

It is interesting to note that vessels belonging to neutral nations with the exception of Dutch ships have increased their participation due to the withdrawal of several vessels belonging to the belligerent nations. Dutch bottoms which are in fifth position had a share of P.24,196,191 as compared with P.26,218,926. The share of other vessels are as follows: Danish P.22,091,761 in 1939 as compared with P.21,588,747 in 1938; Germany, P.20,796,138 as compared with P.21,878,068; Swedish, P.9,414,098 as compared with P.7,354,428; Panaman, P.4,338,988 as compared with P.3,458,576.

Tokyo Sugar Men Build Clubhouse

Leaders of Industry Erect Magnificent Structure Through Past Two War Years

By W. HARVEY CLARKE, Jr.

A CREDITABLE addition to Tokyo's expanding skyline of modern fire and earthquake-proof structures and what is reputed to be the finest and best equipped club building in Japan rises five storeys to a height of 20.2 meters from the sidewalk and extends through a basement and a sub-basement to tertiary bedrock 21 meters underground at 7 Yurakucho 1-chome, Kojimachi Ward, directly south of the new home of the First Mutual Life Insurance Company. Erected in its entirety during the nationally troublous two-year period between August, 1937, and August, 1939, for the Japan Sugar Producers' Association (Nihon Togyo Rengokai) and the Sugar Industry Club (Togyo Kyokai), its total cost—including interior equipment—exceeded Y.1,737,000. The site of 1,314.87 sq. meters is located ideally for the purpose of the club in the central Hibiya District of the Capital. As clubhouse quarters the structure is an enduring monument to the enterprise of the thirteen sugar producing concerns of Japan, avers Mr. Motoo Utsumi, Secretary of the Association, which occupies offices on the fifth floor of the building.

The Sugar Industry Club of Japan, whose president is Mr. Naomichi Takechi, former head of the Taiwan Sugar Manufacturing Company, was founded barely three years ago in 1936 and now has 216 members representing the organizations listed below in the capitalizations:—



Outside view of New Sugar Industry Club Building, Ritz Restaurant entrance at right

Concern	Capitalized at (In Yen)
Dai Nippon Sugar Manufacturing Co.	74,420,000
Taiwan Sugar Manufacturing Co.	63,000,000
Meiji Sugar Manufacturing Co.	58,000,000
Ensuiko Sugar Manufacturing Co.	36,937,500
Teikoku Sugar Manufacturing Co.	27,000,000
Showa Sugar Manufacturing Co.	15,000,000
Manchurian Sugar Manufacturing Co.	10,000,000
Okinawa Sugar Manufacturing Co.	7,500,000
Hokkaido Sugar Manufacturing Co.	5,000,000
Saghalin Sugar Manufacturing Co.	5,000,000
Taito Sugar Manufacturing Co.	3,000,000
(East Formosan Sugar Manufacturing Co.)	
Chuo Sugar Manufacturing Co.	2,820,000
Shinko Sugar Manufacturing Co.	1,200,000

The Sugar Industry Club Building, with a floor space totaling 5,650.97 sq. meters, is reared upon a ground area covering 809.5 sq. meters. Built wholly in conformity with the latest trend in modern

members representing the order of their declared

architectural style, the first two floors of the ferro-concrete structure are faced with huge slabs of native white granite, while the upper three storeys are surfaced with cream-colored mosaic tile. In



A corner of the main reception lounge



Part of foyer on first floor



Entrance to club members' dining-room on second floor



Circular stairway leading from foyer to second floor

constructing the foundation for the building, the caisson-skinking method was employed to ensure a secure base for the structure which was to stand upon ground where the nature of the substrata of the earth was known to be soft and unstable.

Window sashes, casements and doors throughout the club building are made of airtight stainless steel parts or fitted with non-rusting white bronze.

Space in the building is distributed as follows:

First floor entrance vestibule, main reception lounge, foyer, billiard hall and a special room for various games.

Second floor lounging hall, members' dining room, library and smoking room.

Third floor lounge, banquet hall, club rooms and two typical Japanese-style rooms.

Fourth floor lounging hall, club rooms and a large room for special conferences.

Fifth floor office and an adjoining reception room for Mr. Setsuo Nakase, managing director of the association and the club, offices of the association, and a small and a large conference room.

First basement the Ritz Restaurant (open to the public), which has the most spacious culinary quarters in the city, and a barber shop.

Sub-basement accommodation for the mechanical equipment of the building, including the only completely automatic control switchboard in Tokyo.

The Japan Sugar Producers' Association, whose president is Mr. Aiichiro Fujiyama, also head of the Japan Sugar Manufacturing Company, controls the thirteen concerns named above. These companies produce annually, besides sugar, 60 per cent of the absolute and 65 per cent of the industrial alcohol output of Japan. They also have a paper pulp by-product amounting to approximately 35,000 metric tons per annum.

The designing and specifications for the Sugar Industry Club Building are credited to the Tokyo architectural firm of Watanabe. Construction was undertaken by Shimidzu Gumi, Ltd., leading Japanese contractors.

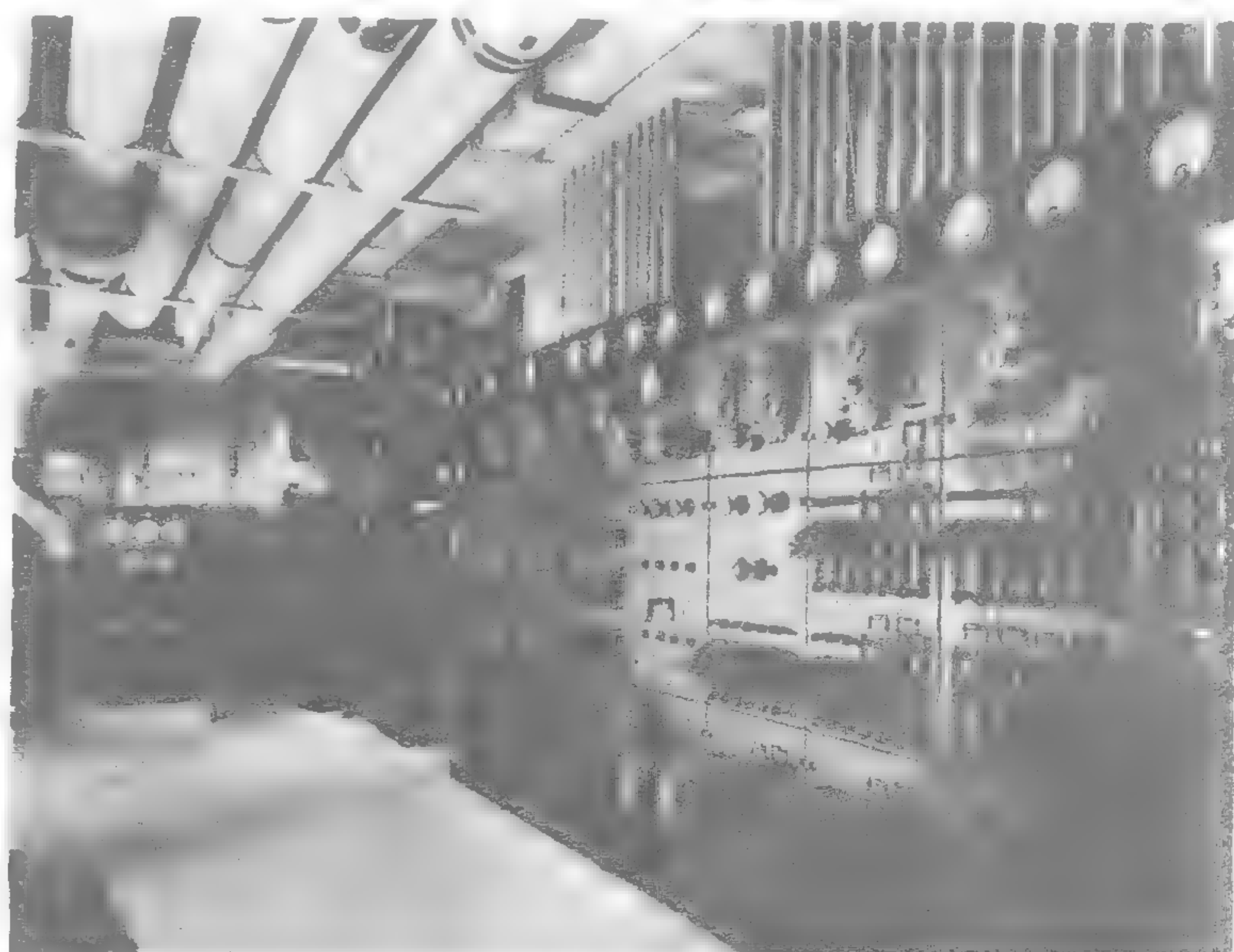
Various essentials for the building, such as electrical appliances and other interior fittings, were supplied by the following firms:

Item	Firm
Electrical engineering work	Sanki Industrial Co.
Electrical devices and window curtain	Takashimaya
Electric clocks and pantry lifts	Uchiwa Trading Co.
Telephones and electric bells	Suwa Industrial Co.
Heaters, coolers and elevators	Mitsubishi Trading Co.
Refrigerating units	Takasago Heaters, Ltd.
Plumbing equipment	Suga Shokai
Furniture	Mitsukoshi, Terao Shoten,

Mitsu Shoten and the Fuji Woodwork Shokai.



One end of the most spacious kitchen in Tokyo, in basement



Automatic control switchboard in Sugar Industry Clubhouse, only one of kind in Tokyo

Gold Mining in Korea

By ALF WELHAVEN

(*American Chamber of Commerce Journal, Manila, P.I.*)

THE Igorots learned the art of mining from the Chinese according to some authorities. The following notes on gold mining in Korea, where the Chinese also introduced their mining methods, may therefore be of interest to gold miners in the Philippines.

Korea is a peninsula, lying between the 33rd and 43rd North Parallel and between the 124th and 131st East degrees of Longitude. It is bounded on the North by Manchuria and Asiatic Russia, on the East by the Japan Sea, on the West by the Yellow Sea, and on the South by the Straits of Tsushima.

Korea is a mountainous country. The Eastern Coast is steep and rocky while the Western slope of the peninsula is more level and is fringed with thousands of islands. There are many rivers in Korea, but none of them are navigable to steamers for any appreciable distance, because of the numerous and shifting sand bars.

The climate of Korea is healthful and resembles that of the Eastern United States, with cold winters and hot summers, except that Korea has a definite rainy season lasting for six weeks in July and August.

The geologic formations are mostly archæan and paleozoic rocks with recent volcanic rock intrusions. The climatic conditions have been favorable to erosion; auriferous gravels can be found in the streams in all of Korea's 13 provinces.

The Koreans come of Mongolian stock! They are tall and well built. They are an unusually homogeneous race, because inter-marriage with other races is extremely rare. The population of Korea is about 20 millions, of whom less than half million are Japanese and Chinese, and less than 1,000 are Occidentals.

Korea has been known as the Hermit Kingdom because for centuries all intercourse with the outside world was forbidden by the Emperor, and if any foreigners were unfortunate enough to land on Korea's shores, they ran the risk of being beheaded, or were at least banished to some island.

This isolation resulted in stagnation of Korea's civilization, so that at the beginning of this century Korean life, customs, and learning were at the same stage as those of China 300 years earlier.

Korean literature and civilization were patterned after those of China and were brought to Korea by the Chinese sage and prince, Kija, who migrated from China to Korea in 1122 B.C. The Korean people hold his memory in great reverence and his grave can still be seen near the city of Pying Yang in Northern Korea.

The origin of gold mining in Korea is shrouded in antiquity, but it can at least be traced back to the followers of Kija, who in 1122 B.C. introduced what were then the latest Chinese methods of gold mining.

Arab writers of the 9th century tell of Korea's great gold resources, and Chinese history refers to the tribute of gold sent annually by the Kings of Korea to the court of Peking.

It is known that Korea produced more than one half million dollars worth of gold yearly from her placers for many years, but the fact that aliens were forbidden entry into Korea did much to create exaggerated and fanciful stories of Korea's wealth of gold. All of the Korean emperors were, for instance, supposed to be buried in coffins of solid gold and as late as 1867 a German named Oppert decided to secure some of these solid gold coffins. He organized an expedition in Shanghai ascended the Han river and started to excavate what he thought was a Royal Tomb. He had neither enough tools nor time, as the Koreans build mounds sometimes 100 feet high over the graves of their rulers, and Oppert never reached the coffin. He and his raiders were attacked by the Koreans and barely escaped with their lives.

History shows that gold mines, especially in Northern Korea, were worked by the Koreans for many centuries before the arrival of foreigners.

The Koreans are good prospectors and prospecting is rendered easy because all the hills are denuded every fall of brushwood which the Koreans use for fuel.

Up to 1895 the mining districts in Korea were under the control of the Imperial Household and no one could engage in mining except under the direction of government officials. However, the privilege of working mines was often delegated by the Imperial Household to provincial governors or to the magistrates who exploited the gold deposits for the Maximum immediate yield rather than for their proper development.

The positions of governor or magistrate were often sold to individuals who had no better qualifications for the office than the necessary cash. These officials tried to reimburse themselves quickly by squeezing the miners and farmers in the districts they were supposed to govern.

Korean Mining Methods

The tools and methods now used by the Koreans in their mining operations are very similar to those they used 500 years ago. They are crude and primitive but the Koreans have attained great skill in their use. Until 40 years ago most of the gold produced in Korea came from placer mining, but since the introduction of modern mining methods and machinery by foreigners, lode mining has furnished the greater portion of the gold produced.

Placer Mining

The tools used by the Koreans in placer mining are hoes, three-man shovels, bailing buckets, screens, baskets, and panning bowls. The three-man shovel is a large affair, one man guiding the shovel by the handle while two men pull and swing the shovel by means of ropes attached to the blade. The bailing buckets are handled by two or more men who dip the bucket in and out of the water by means of ropes attached to each side. They swing the bucket in unison and can handle lots of water at moderate lifts.

The methods of placer mining varied with the ground. When a shallow deposit in a narrow valley was to be worked, a trench or ditch was first dug near to and parallel with the stream. This ditch was used as a sluice for washing the gold bearing gravel and the water was deflected to one side whenever cleanup was undertaken. The paystreak is called "Kamchul" which means "sweet earth" in Korean. This Kamchul was carried to the panning pool, while the rocks and coarse gravel were thrown to one side.

When the Koreans wished to work deeper placer deposits in broad valleys they sank pits which varied in size according to the number of men used. When they reached the paystreak the Kamchul was carried to the surface and piled in heaps or carried to the panning pool if sufficiently rich. This method was wasteful because so much ground had to be left behind for dumping space while the pits were dug.

Occasionally the Koreans sank shafts to reach the paystreak but because of its cost this method was seldom used.

Placer mining in Korea was not carried on between December and March on account of the cold weather. In Northern Korea the temperature often falls to 32° below zero and the ground freezes four or more feet deep. During the rainy season in July and August placer mining was also stopped.

The Koreans were able to work lean ground because much of the placer mining was done by farmers during their leisure time.

When placers were worked by miners they usually worked in gangs of five or ten under the direction of a boss, who usually furnished the miners with food, tobacco, and straw shoes. He also paid the taxes according to the number of men he employed. The taxes were paid twice a month and were based on a fixed amount for every five miners. The boss as his share received 75 per cent of the production while the miners divided the remaining 25 per cent. The Imperial Household made no serious effort to protect or promote the mining industry but merely collected as much in taxes as the traffic would bear.

Unscrupulous officials often levied unjust taxes or made false returns to the Imperial Household of the taxes collected and the weight of the gold recovered.

Lode Mining

Lode mining in Korea was carried on with very crude methods, and worst of all, the miners lacked explosives. Black powder was in use in Korea in the army, but the Emperor, fearing rebellion, forbade the possession of firearms and powder among the people. The tools used by the Koreans in lode mining were: iron moils, with or without handles, iron hammers, weighing from three to five lbs., rocking stones for crushing the ore, grinding stones for grinding the ore after it had been crushed by the rocking stones, wooden bowls for panning the finely ground ore, and finally water wheel stamp mills for crushing and amalgamating gold ore.

In lode mining the common practice was to sink small shafts or pits on the outcrop but adits also were driven by the Koreans at some mines.

The ore was extracted by breaking the vein with the moils and hammers. When the ore was too hard for this method a fire was built against the face of the vein. The rock was thoroughly heated and water was then thrown on the heated rock making it easy to break. The first man who returned to the face after the fire had been extinguished could select his portion of the vein and this lead to the Korean miners becoming able to stand very high temperatures.

The Korean miners had no pumps worthy of the name. They usually unwatered their workings by carrying the water out. In most cases they were therefore compelled to discontinue mining operations a short distance below water level.

The ore after being mined was crushed by hand or in the water-wheel stamp mills. The rocking stones which weighed about 400 lbs. were rocked by four men, one pair on each side, who rocked back and forth in unison. By means of this rocking the ore was crushed from chesnut size to about 20 mesh. A rough screen was used during the crushing and the over size was returned to the stone for further crushing.

The produce from the rocking stone was carried to the grinding stone where it was rubbed to a fineness of about 80 mesh. This was then panned in wooden bowls 24 inches in diameter and four inches deep. The Koreans are expert panners.

The second method of crushing ore was by means of the water-wheel stamp mill, which was usually made up of ten stamps driven by an overshot water-wheel. The wheels were made of wood and had a diameter of about 12 feet. The mills were usually five stamps on each side of the wheel, but sometimes the Koreans built them with ten stamps on each side.

Ore of about $\frac{3}{4}$ -inch size was fed into the mortar by hand. The wooden stamps were shod with iron and dropped on cast iron dies. Mercury was fed to the mortar and the cleanup was made periodically. The crushing capacity of such a ten-stamp mill was only about 1,000 lbs. per 24 hours but they were cheaply erected and operated and when the Koreans struck pay ore they lost no time in getting out the gold. I have seen over 100 ten-stamp mills crushing ore from one Korean mine. Here in the Philippines the prospectors form corporations. In Korea they go after the ore.

The rate of taxation for lode miners in Korea was different to that for placer miners, in that each miner was taxed instead of each group, but there was no uniform regulation in force for the control of the gold mining districts, with the result that there was much abuse and much graft.

As mentioned before the Koreans are good prospectors and all the ore bodies which outcrop on the surface in Korea had been found before foreigners commenced mining operations in that country.

Foreign Concessions

Korea had been absolutely closed to foreigners until 1883 and no mining was undertaken by any foreigner until 1895 when new regulations for mining were issued by the government. This marked the beginning of modern methods in the development of gold mining in Korea.

In 1895 the Emperor of Korea for political and economic reasons decided to grant gold mining concessions to representatives of the Western Powers.

The first concession under the 1895 regulations was granted to an American, Mr. James R. Morse, who was given the mineral rights in the Unsan magistracy in North Pying Yang Province. The area of the district is 400 square miles. The concession called for a payment to the Imperial Household of 25 per cent of the net profit, the concession to run for 25 years. All mining supplies were to be admitted duty free.

There followed in rapid succession the granting of concessions to representatives of other nations, on terms similar to the American concession. The first German concession was granted in 1897, but operations were not successful and the concession was abandoned. In 1908 another area was selected by the Germans and on this property they operated a five-stamp mill during 1910 and 1911 after which they had to stop because there was no more ore.

The first British concession was granted in 1899 giving them the mining rights in the Avunsan district about 50 miles East of Pying Yang. A 20-stamp mill was built and was operated during 1903 and 1904 with good results, but the ore body pinched out and operations therefore came to a stop.

The second British concession was granted in 1905 giving a British syndicate the Mining rights in the Suan district. After doing some development work, the British leased their rights to an American concern, the Collbran-Bostwick Development Company, which formed the Seoul Mining Company to operate the concession. They worked their copper-gold deposits profitably for a number of years, but discontinued operations when they thought the ore bodies had been worked out.

One of their employees, Mr. J. D. Frazer, bought what was left of the Seoul Mining Company. He found new ore bodies and he has been producing 300 tons of ore per day for a number of years and is making a handsome profit for himself and his partner.

The Chiksan concession in Central Korea was granted in 1900 to a Japanese syndicate. They did considerable work but failed to make money and they therefore turned over their rights to an American company in 1911. That company milled the ore from the quartz mines and also built and operated successfully the first gold dredge in Korea. This property has been closed down for some years as the deposits have been exhausted.

The French concession was granted in 1901 by the Imperial Household to Monsieur M. Saltarel to work a mining area in the Changsong district, 18 miles West of the Unsan district. Milling operations began on this property in 1912, but the French sold their rights in 1922 to a British syndicate which continues to operate this property successfully. At present the Great Nurupi mine on the French concession is producing about 500 tons per day and the mine continues looking well at a depth of 1,600 feet.

The Italian concession was granted by the Korean government in 1905 to work an area in the Huchang district. This concession contains a copper deposit which the Italians developed in a desultory way without success. During the World War they sold their rights to a Japanese syndicate, but these people also failed to make it pay, due to the drop in copper prices, and the property has been lying idle for years.

The foregoing were the principal mining concessions granted to foreigners by the Korean Imperial Household.

The Oriental Consolidated Mining Co.'s Concession

The concession granted to the American, James R. Morse, was the first, and has been the most successful of all, and a short history of this property may therefore be of interest. Mr. Morse sent mining engineers to examine his concession. They reported the existence of large, low grade quartz veins, but they turned down the property because they concluded that the Koreans could not be taught modern mining methods. It would therefore be necessary to work the mines with Cornish miners, and this would be too expensive in view of the low average value of the ore bodies. Mr. Morse therefore sold his rights to Mr. Leigh Hunt and Senator J. Sloat Fassett. These gentlemen may justly be called the fathers of modern mining in the Far East and to their courage and enterprise is due the successful development of gold mining in Korea. They developed the Unsan concession until it became one of the World's foremost gold producers. It was, and still is, the largest gold mining enterprise in the Far East, as far as tonnage is concerned, but in recent years the Benguet Consolidated Mining Company and the Balatoc Mining Company have both out-distanced all other mining companies in the Orient as regards gold production and dividends.

The Unsan concession was based on 25 per cent of the profits reverting to the Imperial Household. In March 1899 the agreed 25 per cent of the profits was compounded for a lump sum paid in cash and for a yearly payment thereafter of \$12,500.00. At the same time the concession was extended until March 1937 with the privilege of a further extension of 15 years after 1937.

Geology of Unsan Concession

The country rock of the Unsan concession is granite and granodiorite. The ore bodies occur in fissure veins, and the lode matter is quartz containing gold, galena, zinc blende and pyrite.

There are several hundred quartz veins on the concession, but most of them are too low grade or too small to be worked profitably. Profitable mines were developed at Chittabalbie, Maibong, Kuk San Dong, Tabowie, Taracol, Chintui, and at Candlestick. Of these mines the ones now being operated are the Tabowie, Taracol, and Chintui, located along the Tabowie-Taracol-Chintui ledge channel, which can be traced a distance of more than 14,000 feet. The Tabowie and the Taracol-Chintui ledges are faulted portions of this ledge channel. The fault zone caused a horizontal displacement of 3,000 feet and an upthrow on the Taracol side of about 1,000 feet.

Development of Unsan Concession

It was in the year 1896 that Mr. Leigh Hunt and Senator J. Sloat Fassett commenced operations on the Unsan concession. They believed that the Koreans could be trained to become good miners and this belief of theirs has been abundantly justified.

In 1897 they erected a 20-stamp mill at the Chittabalbie mine. This mill was the pioneer of modern stamp mills in the Far East. It was steam driven and equipped with the standard rock crushers, stamps, amalgamating plates, and concentrators. The free gold was recovered in the form of amalgam and the concentrate, saved on the vanners, was shipped to Smelters in the United States. The Chittabalbie mine ore averaged over \$15.00 per ton during the first two years of its life and it was with the surplus from this operation that Mr. Hunt and Senator Fassett were able to develop and equip the other mines on the concession.

The Chittabalbie mine was abandoned in 1905 after having produced 152,000 tons of ore worth \$1,500,000.00.

In 1899 a 40-stamp mill, and cyanide plant were erected at Tabowie and in 1907 this was enlarged to 80 stamps. Tabowie Mine, the largest in Korea, has to date produced over three million tons of ore worth over 19½ million dollars and is still producing.

Stopping operations in this mine are at the present time being carried on at a depth of 3,250 feet below the outcrop, or 2,800 feet below the collar of the shaft.

A 20-stamp mill and cyanide plant were erected at Kuk San Dong in 1900. This was increased to 40 stamps in 1905 and by 1915 when the Kuk San Dong mines had been worked out they had produced 552,000 tons worth \$2,400,000.00. The Kuk San Dong mines were flat "blanket" veins, requiring neither pumping nor hoisting, and very little timber. Although the ore averaged only \$4.35 per ton the profit realized was good.

A 40-stamp mill was started at Maibong in 1902 and was closed down in 1918 due to the exhaustion of the ore body, which yielded a total of 543,000 tons worth \$3,900,000.00.

In 1903 an 80-stamp mill and cyanide plant were built at Taracol to crush the ore from the Taracol and Chintui mines. To date these mines have produced more than 3½ million tons worth approximately \$19,500,000.00. Taracol is the second largest mine on the Unsan concession and ore is being developed there at the present time at a depth of 2,000 feet below the collar of the shaft.

In 1908 a ten-stamp mill and cyanide plant were installed at East Candlestick, and this mill was closed down with the exhaustion of the ore body, after having milled 46,000 tons worth \$513,000.00. At West Candlestick a small mill was installed later. This mill treated 18,000 tons worth \$228,000.00 before the vein was worked out.

Messrs. Hunt and Fassett in the year 1900 engaged Mr. Henry Cleveland Perkins, the eminent American mining engineer, to examine their concession. His report was favorable and he organized the Oriental Consolidated Mining Co. to take over the Hunt-Fassett interests. The Oriental Consolidated was organized in 1900 under the laws of West Virginia with a capital of \$5,000,000.00 in \$10 shares of which 430,000 shares were issued. Mr. Perkins

was elected the first President and held that position without any compensation until the time of his death in 1926.

The Mills, Hearst, and Hanggin families became heavily interested in the Oriental Consolidated Mining Company. Members of these families or their representatives have served as Directors of the Oriental Consolidated Mining Co. continuously, together with Senator Fassett and Mr. Hunt who retained large holdings in the company, and it is largely due to the broadminded and wise policy of Mr. Perkins and these men that the Company's career has been so creditable. The Oriental Consolidated Mining Company paid its first dividend of five per cent in 1903 and has paid dividends continuously since then. To date it has produced over 8½ million tons of ore having a gross value of \$49,000,000.00 and has paid more than 12 million dollars in dividends.

At present the Oriental Consolidated is milling approximately 600 tons per day. This ore, which runs from \$5.50 to \$6.00 per ton is treated by means of stamp milling, flotation, regrinding and cyaniding with an overall net extraction of 91 per cent from heads to bullion.

About 1,200 laborers are employed on the property and the foreign staff consists of 28 Americans and Europeans.

The company has been liberal in its treatment of the employees and every encouragement has been given to obtain and retain good men. The average length of service of the foreign staff exceeds ten years.

The property of the Oriental Consolidated Mining Co. being situated in an isolated and backward country, it was necessary to equip it with every facility for making itself sustaining such as machine shops, foundries, woodworking plants, hospital and school, in addition to the reduction works.

There were no roads worthy of the name in the early days, and all heavy machinery was therefore brought in in sections.

All supplies and equipment coming from America or Europe had to be transhipped at Kobe into small coasting steamers which discharged their cargo at Chinnampo. A fleet of sailing schooners owned by the company brought the supplies around the coast from Chinnampo to Anju where the goods were transhipped to flat-bottomed river boats. These drew about 10 inches of water and were pulled upstream by man power to a point some 20 miles from our largest mines. The remaining distance was covered by bull carts. At the present time there is a good motor road to the mines from the railway and all goods are hauled in motor trucks.

Steam power was first used at the mines and the fuel used was wood. This was cheap in the early years, costing only \$1.00 per cord for good pine and oak. The cost of this fuel steadily increased, however, and with the deepening of the mines it became necessary to use electric power underground. The Company therefore built one 500 kw. hydro-electric plant, with a five mile transmission line, generating and transmitting current at 13,000-volts, and one 1,200 kw. hydro-electric plant generating at 2,300-volts and transmitting at 33,000-volts over a 28 mile transmission line. These two power systems complete with storage reservoirs cost about \$900,000.00. The two plants furnish sufficient power at the present time excepting for three or four of the winter months when the stream flow is reduced by cold weather. During the cold season the hydro-electric power is supplemented by power generated by a 500 kw. Diesel-electric unit.

When operations were first started, the only currency in circulation was copper cash. It took 2,000 of these coins, with a square hole, convenient for stringing to make one peso. The Company had to ship money in by the schooner load and had to keep warehouses full of money to meet the monthly payroll.

Later on came the period of nickels, of which we had three kinds in circulation, genuine nickels, good counterfeits and bad counterfeits but all were used, and they were an improvement on the copper cash.

Around 1905 we commenced using silver yen and Mexican dollars. We bought Mexican dollars in China at a discount and used them at the mines where they were worth par, and we made a handsome profit on the transaction.

We transported the dollars to the mines on cow back in boxes of 1,000 each, two boxes to each cow. I have been in charge of convoys of 40 cows or more on many occasions. The cows were docile and would cover the distance from the coast to the mines, 60 miles, at say two miles an hour, but it was inconvenient when some cow wandered off to the hills to eat grass with two thousand

dollars on her back while one had to keep an eye at the same time on all the other cows.

After the Russo-Japanese war, a Japanese Bank, the Dai-Ichi-Ginko, was authorized to issue paper money in Korea, and with the coming of paper money our payroll difficulties were simplified.

The mines require much timber because the ground is heavy. Excellent mining timber, mostly oak and red birch, is obtained from the Company's timber concession, a tract over 400 square miles in area, adjoining the mining concession. A 21-mile long railway with locomotives and logging cars has been built by the Company and is operated in this timber concession which lies 2,000 feet above the mines. Incline tramways lower the timber from the railway to the mine timber yards.

The tonnage mined and milled to date by the Oriental Consolidated Mining Company has averaged less than \$6.00 per ton, but the low working costs and the large tonnage have resulted in a good net profit per ton.

Last year the Japanese government enforced an export embargo on gold, which has compelled all gold producers to sell their gold at a price fixed from time to time by the Imperial government. This price is about 20 per cent below the world market price for gold.

This has been a severe handicap for gold producers in Korea, but during this same period the mining companies have benefited from the depreciation of Japanese and Korean currency.

Miners in Korea are paid about 60 sen per day, which is now the equivalent of 35 centavos. In recent years Japan has become a great industrial nation, producing all kinds of machinery and mining supplies which are cheaper by far than similar equipment either in America or in Europe.

By paying for labor and supplies in the depreciated currency the costs of the Oriental Consolidated Mining Co. are now the lowest for a great many years. This year the overall expenses have been about \$2.50 per ton milled, with a downward tendency. The overall expenses for September were \$2.44 per ton. This covers all expenses, including development work, construction work, and all costs of offices and representation in America and Europe. It will be agreed that this cost per ton is very creditable, considering the depth of the mines and the other local obstacles to cheap mining.

The Korea Miner

The Koreans are able placer miners and lode miners, employing the methods and the tools they have used for many centuries. They have been quick to learn Western mining methods, and the mines of the Oriental Consolidated Mining Company have been the training school for thousands of Korean miners, blacksmiths, carpenters, and artisans in general.

The Korean miner is good natured, has a sense of humor, and responds to decent treatment. He can be taught to become very efficient, as is shown by the variety of work he has learned to do well under foreign supervision.

The Korean miners are expert hand drillers and they are also good machine men. They are good judges of bad ground and make fine timbermen. Owing to the Korean miner's skill as a hand driller, his low wages, and the advantages of hand drilling over machines, the Oriental Consolidated Mining Company uses machine drills only when speed is of paramount importance. My opinion is that the Korean is by far the best miner in the world for the money, and that Korean labor is the only really cheap labor.

The Korean miner has but one fault:—he is very careless, and to this carelessness is due more than 90 per cent of all mine accidents.

Korea Under Japanese Rule

Korea ceased to be an independent country in 1910, when it was annexed by Japan. When the annexation took effect the Japanese government promised to respect the existing foreign concessions in Korea, and this promise has been kept.

The Japanese government general in Korea have brought about far reaching reforms. They have reforested the mountains and covered the country with a network of railroads and highways. They have eradicated epidemics, improved sanitation, and have built waterworks at all towns of any importance. They have extended telegraph and telephone lines to all towns and villages of any consequence, and auto bus services are found now throughout Korea, while passenger and mail carrying aeroplanes make daily connections between the important centers.

The Japanese government general have to their credit wonderful achievements in education, judicial reform, a just taxation system, and a thousand and one other changes. These have made Korea over from a backward monarchy with a lovable but down trodden people to a modern, well ordered, peaceful, and well regulated province of Japan.

The Japanese have also changed the mining regulations. Under the present mining laws the royalty to the government is one per cent of the annual gross output, in addition to which the mine operators must pay a ground tax of 15 sen for every 1,000 square yards. Mining supplies are allowed to enter Korea duty free. Foreigners cannot now acquire mining rights in Korea, except by becoming Japanese juridical persons. It is but natural that the government should reserve the mining rights for its own subjects or for people who are willing to come in under the Japanese corporation law.

On the whole, the mining laws now in force in Korea are fair and liberal and offer encouragement to the mining industry.

Korea can hardly be classed as a great gold producer. The stories of her huge golden wealth had no more basis on fact than similar stories of other distant and little known lands.

The gold production in Korea in modern times is largely due to the enterprise of Americans.

No new gold discoveries of importance have been made in Korea in recent years, but it is to be hoped that additional gold mines may be found, because in but few countries are conditions as favorable for gold mining as in Korea.

THE KOKIU TIN MINES

Perhaps no single product plays a greater rôle in provincial economy in China than do the tin slabs of the Kokiu mines in the province of Yunnan. In the last three years, more than 9,000 tons of tin were annually produced and exported from the Kokiu mines. The sale brought Yunnan from \$20,000,000 to \$30,000,000 depending on the market quotations.

Since 1938 the production and marketing of tin in Kokiu have been controlled by the Yunnan Provincial Bank which pays \$2,200 to \$2,300 for every 1,000 catties of the metal produced by private miners. This, however, had a retarding effect on the whole output as the figures show that the 1938 production represented a decrease of more than 2 per cent when compared with 1937. The recent increase of the Provincial Bank price to \$5,020 for 1,000 catties of tin is expected to bring the production to an unprecedented level.

Besides several hundred open pits and surface workings that belong to private owners, there are in Kokiu to-day 40 main lode

mines in operation and 60 native smelting places, all worked by human labor, using primitive methods.

The Yunnan Tin Corporation is under the technical supervision of Mr. S. B. Archdeacon, an Englishman who designed the reverberatory and purifying furnaces in the Yunnan plant. The corporation is producing 3,000 tons of high-quality tin slabs a year which is about one-third of Kokiu's total annual output, which in turn is approximately 80 per cent of China's yearly production of that metal.

Wolfram ore is another rich mineral of Yunnan. Its presence was discovered only three years ago. It is abundant in the area west of the Huangmaoshan tinfields near Kokiu. The ore dug out of the ground is collected by the Yunnan Wolfram Company, a semi-official concern. The average output is approximately 80 tons a month and its exports were valued at close to \$4,000,000 last year.

Trees of Malaya Provide Important Timber Resources

By ERIC HARDY in British Malaya

THE flora of Malaya is amazingly rich and fascinating to the botanist, but from an economic point of view, its main advantage apart from the rubber industry lies in its timber resources, which are of paramount importance to Britain in times of emergency.

In recent years in the United Kingdom quite a lot of Kapur or Kapor wood has been used for the construction of floors, railway carriage members and general construction work. This is the Camphor wood (*Dryobalanops oblongifolia*), a tree named from its odour and found extensively in the Malay Peninsula, Borneo and other East Indian islands. In Borneo it is used for all manner of constructional work which does not come into contact with the ground or with water. Rafters and roof beams, shelves and the lining of wardrobes are typical usages. It is a moderately hard and heavy wood of medium strength, weighing forty to fifty pounds per cubic foot, air-dry. The heartwood is brownish red, the narrow sapwood yellowish-white. The tree itself grows tall and straight. It is usually between fifty and a hundred feet before the first branch appears from the trunk, which has an average diameter of two feet. The so-called red camphor of North Borneo (the "kapor miang") is the hardest and heaviest of the many varieties. Unfortunately this timber is difficult to season except by air-seasoning first and finishing the drying in a kiln. Subject to dry rot, it is therefore unsuitable for use in water or on the ground, but there are instances of shingles that have lasted for twenty years in North Borneo.

Similar large trees with clear boles of seventy to eighty feet are the red *seraya* trees, sometimes called Borneo red cedar (several species of *Shorea*) and classed with the *meranti* of the Federated Malay States and the red *lauan* or Philippine mahogany. They are useful as a clean, easily-worked, knotless timber and find a place in the construction of railway carriage frames and motor-car bodywork, while the better samples are used in select panelling and for good joinery, interior and shop fittings, furniture and the like. These trees have trunks up to five feet in diameter and grows very abundantly in North Borneo. Its finer grades are attractive enough to substitute for mahogany: there is a cedar-like odour, and a yellow, pale pink or dark red heartwood. Although this wood is not durable in contact with the ground insects do not attack it to any great extent. Growing in association with it are large trees of white *seraya* or Borneo white cedar (*Parashorea plicata*), which is a very light-colored, moderately heavy wood, somewhat coarser than red *seraya* but an excellent wood for constructional work, the poorer grades being used for boxes and packing cases. The finer qualities have been much used in the planking of pleasure rowing boats.

Of course there is the very valuable teak, probably the hardest of all woods and used to back the armour-plating of our warships. Borneo and Java teak, which is also known in British trade as *Selangan Batu*, is not the same as Burma teak (*Tectona grandis*), but an entirely different species, in the same family as the foregoing camphorwoods and *serayas*, and comprises various species of *Hopea*; it is probably the same as the *yacal* of the Philippines. These are large trees, widely distributed, with very hard, heavy, strong elastic wood, used in Britain for heavy constructional work, platform decking, warehouse floors, sills and stair-treads. It is of course very resistant to insect attack, showing a yellowish-brown heartwood, darkening to greyish-brown after exposure. It weighs 52 to 65 pounds per cubic foot, air dry, compared to 37-47 pounds per cubic foot of Burma teak, which occupies first place on Lloyd's Register of durable woods for marine constructional work. Burma teak is stronger and obtainable in larger dimensions than the teak of India, to which it is preferred for constructional work.



(Photo—Malayan Information Agency)

Twenty-year old borneo camphor trees at Kanching, Selangor

Gurjun (*Dipterocarpus trubinatus*, and allied species) is one of the largest of trees, growing to 175 feet in Burma, where it is very abundant; its trunk is from three to six feet in diameter. It is much used for house building, but it is not very durable upon exposure. In Britain it is used for parquet flooring, staircases and railway carriage and wagon construction, but it needs a thorough seasoning. The closely related *Eng* (*T. tuberculatus*) is used for similar work. This tree is not quite so tall, attaining a height of 80 to 120 feet. Its wood is dark reddish-brown, taking a long time to season, often shrinking and warping with resulting checks and splits, but with preservatives it is used for railway sleepers, floorings and staircase treads.

Scattered throughout deciduous forests is the *Haldu* (*Adina cordifolia*), a large, buttressed tree with fine light-yellow wood that turns reddish brown on exposure and proves excellent for turned articles of all descriptions. Laurel wood (*Terminalia tomentosa*) is a large tree of dark brown wood. Figured varieties compare well with the best Italian walnut for decorative work, and Britain uses it fairly extensively for furniture, interior decorations, cabinet-making, etc. *Kokko* (*Albizia Lebbek*) often planted as a roadside tree, also provides valuable figured wood for panels and interior decoration, for Pullman cars, counters, and office furniture.

Pyinkado (*Xylia dolabriformis*) grows in association with teak in the lower hill forests and is used in Britain for bridges, wharf piling, lock gates, landing stages, belfries, etc. Its strength and durability make it valuable for exposed marine and outdoor work.

It is surprising that so little kapok is cultivated in Malaya, for 80 per cent of the world's supply comes from Java and is obtained from the cotton tree (*Eriodendron Anfractuosum*). The trees have a few straggly leaves at the tops of their branches, the fruits which produce the kapok hanging under the branches. One hundred pods will produce a pound of clean kapok for the mattress industry, and an eight or ten year old tree produces 500-800 pods annually. An acre planted with trees to permit cultivation of pepper, coffee or ground nuts at the same time should yield about 500 lb. of clean kapok and 700 lb. of seeds, which contain 20 per cent of oil for soap-making, the residue making cattle food and the husk fertilizer.

There are also the valuable camphor and quinine products of the Javan flora, the Dutch in Java having almost a monopoly of the world's quinine trade. The *Cinchona* tree, whose bark produces the quinine of commerce, is a native of the South American Andes, and has been introduced to Java and India. The valuable sago palm is, however, a Malayan native, native also to New Guinea. The nutmeg or mace tree is native to the Moluccas and neighboring isles, but has long been cultivated at Penang and elsewhere. It comprises various species of *Myristica*.

Ironworks in Shanghai

NUMEROUS Japanese ironworks have been organized since the removal of the theater of war from the vicinity of Shanghai. With the outbreak of hostilities in Europe, these factories are expected to enjoy very good business as practically no metal, machinery, or hardware will be sent here from England and Germany for some time. The prices of these products have already doubled twice since the early part of September.

China organized its first ironworks in 1862, but it was not until 1916 when the European Powers were engaged in the World War that some progress was made in the manufacturing of machinery in this country. During the year, the Hwa Sen Works was organized to manufacture motors and other machinery. Meanwhile the Min Ching Machine Works was established to manufacture printing plants. In 1921 Chinese Ironworks was organized in Woosung to manufacture textile machinery.

Prior to the outbreak of hostilities in Shanghai in 1937, there were a number of ironworks and machine shops in this metropolis, but none of them were large. Their capitalization ranged from a few thousand dollars to \$500,000. The Ta Lung, Shiu Chong, and Ho Hsing Ironworks were capitalized at from \$100,000 to \$500,000. During the hostilities, all these factories were destroyed. By the end of May, 1938, it was reported that 32 Chinese ironworks had resumed operations in the extra-settlement roads and 112 in the northern and western part of the International Settlement.

As to Japanese factories, 26 are operating in Shanghai at the present time. They are:

- (1) Whangpo Ironworks, established in October, 1938 at Chow Chia Tsai Road with a capital of \$35,000.
- (2) Chungshan Ironworks, reorganized from the Hwa Fung Enamelware Factory at Chow Chia Tu, Pootung.
- (3) Chungshan Ironworks, reorganized from the Ho Fung Ironworks at Chow Chia Tu, Pootung, with a capital of \$1,000,000.
- (4) Chungshan Ironworks, at No. 769 Kungping Road.
- (5) Chungshan Ironworks, at No. 2501 Brenan Road.
- (6) Kung Ho Electric Machine Works at No. 109 Chaoufoong Road, with a capital of \$50,000.
- (7) Asia Ironworks at No. 22 Shih Cing Road, with a capital of \$1,000,000.
- (8) Shanghai Electric Works at No. 449 Kweiyang Road, with a capital of \$100,000.
- (9) Kung Hsin Ironworks at No. 710 Thorburn Road, with a capital of \$200,000.
- (10) Shanghai Iron Company, reorganized from the Tseng Ho Kung Shun Foundry at No. 550 Chuanshan Road.
- (11) Ta Tung & Co., at No. 611 Kunming Road, with a capital of \$10,000.
- (12) Kung Li & Co., reorganized from the Kung Li Company at No. 269 Yochow Road, with a capital of \$8,000.
- (13) Chang Pang & Co., reorganized from the Chow King Chang Ironworks at No. 250 Mei Ke Road, Hongkew, with a capital of \$10,000.
- (14) Great Eastern Ironworks at No. 1158 East Yuhang Road, Hongkew, with a capital of \$20,000.
- (15) Shanghai Electric and Chemical Works at No. 103 Chin-chow Road, with a capital of \$50,000.

- (16) Great Continental Ironworks at 1185 Kunming Road, with a capital of \$60,000.
- (17) China Needle Factory at West Recreation Road in Kiangwan, with a capital of \$20,000.
- (18) Ta Hsin Ironworks, reorganized from Chinese Ta Hsin Ironworks at 1285 Chow Chia Tsai Road, with a capital of \$50,000.
- (19) Hsin Chen Iron Tubes Factory in Chapei, with a capital of \$10,000.
- (20) Kung Ta Electric Machinery Works at 1020 Hwen Peng Road, Chapei, manufacturer of electric wires.
- (21) Hwa Chang & Co., at Patzechiao, Chapei, with a capital of \$15,000.
- (22) San Ho Hsin & Co., at Yangtszepoo, with a capital of \$100,000.
- (23) Hwa Chang Ironworks, managed jointly with Chinese Yi Tai Ironworks at 1379 Chiukiang Road.
- (24) Yi Fung Enamelware Factory, at 441 Li Yuan Road, Nantao, with a capital of \$1,000,000.
- (25) Lien Hwa Iron Works, at Chi Mei Road, Chapei, with a capital of \$4,000.

In the above factories, the Japanese are reported to have invested no less than \$5,000,000. In addition to these 26 factories, the Japanese are building in Shanghai at present no less than 16 new ironworks with a total capitalization of \$2,500,000. These new factories are:

- (1) Pao Chen Glass Factory at Chapei, with a capital of \$70,000; manufacture of glass and machines.
- (2) Yeh Chen Timber Co., at 235 East Broadway, with a capital of \$520,000.
- (3) Hsiang Chang & Co., at 1751 Pingliang Road.
- (4) Shun Ten & Co., at 343 Wen Road, with a capital of \$50,000.
- (5) Tien Chung Ironworks, reorganized from Shun Hwa Ironworks, at Chapei, with a capital of \$55,000.
- (6) Min Hwa Ironworks, reorganized from Chang Hsi Kee Ironworks, at 584 Kunming Road, with a capital of \$30,000.
- (7) Hsiao Pu Ironworks, at Yangtszepoo, with a capital of \$2,000.
- (8) Hsun Hwa Ironworks, at 614 Pingliang Road, with a capital of \$100,000.
- (9) Wu Shun Machine Works, at 734 Chow Chia Tsai Road, with a capital of \$20,000.
- (10) Min Hwa Iron Works, at 562 Peikaier Road, with a capital of \$2,000.
- (11) Tsai Fung Enamelware Factory.
- (12) King Tai Electric Machine Works, reorganized from the Yi Chung Fu Kee Works, at Pootung, with a capital of \$10,000.
- (13) Kwang Fu & Co., at Ke Lan Road, with a capital of \$8,000.
- (14) Shanghai Electric Works, at Lin Ching Road, with a capital of \$50,000.
- (15) Ku Chuan Electric Works, at 728 Chow Chia Tsai Road, with a capital of \$260,000.
- (16) Hsin Hwa Electric Machinery Works, at 955 Chow Chia Tsai Road, with a capital of \$1,000,000.

DIESELS IN THE PHILIPPINES

Power for the Macawiwili Gold Mine, Baguio, in the Philippine Islands, is supplied by a 400 h.p., four-cycle, eight-cylinder, 400 r.p.m. National diesel engine directly coupled to a 250 kva Allis-Chalmers generator. Originally, the power factor was 70 per cent and the power generated was 233 b.h.p. or 175 kw, which represented 60 per cent load on the engine. To rectify this, a 60 kva static condenser was installed and the power factor was increased by 15 per cent. The low power factor was caused by the ball

mill, slow speed, slip-ring motor and the presence of induction motors.

Besides the mill, the generator supplies power to an Ingersoll Rand compressor capable of delivering 1,000 cu. ft. per minute and directly driven by a 175 h.p. synchronous motor. This compressor supplies the air needed in the mine and mill, as well as in the assay office. Due to power shortage, the compressor is only operated at half load.

Chungking Plans Belt Road

CHUNGKING, reports a Chinese traveler recently returned from the interior, stands on the threshold of phenomenal expansion to-day. Negotiations for the demarcation of its boundary from the rest of Szechuen Province have already passed the preliminary stage and before the end of the year the city will become three times bigger on the map. By Generalissimo Chiang Kai-shek's order, Shapingpa, Tschikow, Hsiaohungkai and several other suburban towns will constitute parts of Greater Chungking.

The growth in space will be accompanied by a similar increase in its budget. For the current year, the city is operating on a \$3,000,000 basis. For 1940, however, it expects to have an income of \$7,000,000, more than double the present amount. This it expects to do not by miracle but by readjusting taxation.

Despite the frequent aerial bombings the city is seriously considering the spending of \$10,000,000 on a round-the-city road to be built over a period of three years. Chungking perches on a hilly peninsula watered on three sides by two rivers. It affords an excellent waterfront to be lined by banks, business houses and godowns.

It is going to be a difficult engineering project. Hill-sides have to be cut to make way for the road, which will be above the highest water level on record. At different places, an embankment has to be built across deep dales to a height of some 60 feet. The work, it is estimated, will cost around \$7,000,000, with the remaining \$3,000,000 as reimbursement for land thus requisitioned.

Though now only in blue-prints, the project most probably will be begun early in 1940, especially in view of the expected increase in revenue. The money invested in municipal development will be recovered by re-selling portions of the land thus taken over from the present owners and by the augmented receipts in municipal rates along the new road, which will be seven and a half kilometers long.

At present, Chungking's water-front is the slum area where dwell the city's poor. When the round-the-city boulevard appears, motor-cars and buses can speed on it. There may be tramcars too.

Another project is to blast an underground tunnel to link the central and southern sections of the city. About one kilometer long, the subway will save both time and money for motor traffic and pedestrians, because to-day the only way is to follow the long winding main road. The estimated cost is \$960,000. The tunnel can be used as a bomb-proof shelter in air raids. It can accommodate 100 heavy trucks and 10,000 people at a time. If actual digging is begun at three places simultaneously, the whole subway could, it is believed be completed within six months.

Another task which will be carried over to the next year is the building of small suburb centers in accordance with the general decentralization plan which was adopted following the disastrous May bombings. Several suitable sites have been located, and a loan of \$3,000,000 has been secured from Chinese banks. Four such towns will be laid out during the first period, to be followed by eight more afterwards. All houses will be built, either by the people or by the municipal government, according to a general plan. In every town a park or an athletic ground will constitute

the center with residences, shops, factories and warehouses around it.

Chungking's importance as a transportation center between the north-west and the south-west is increasing. The present ferry service will be improved. Then, in the city itself, the numerous fire lanes, each 15 meters in width, are being converted into roads. At various places in the city several small parks are being laid out.

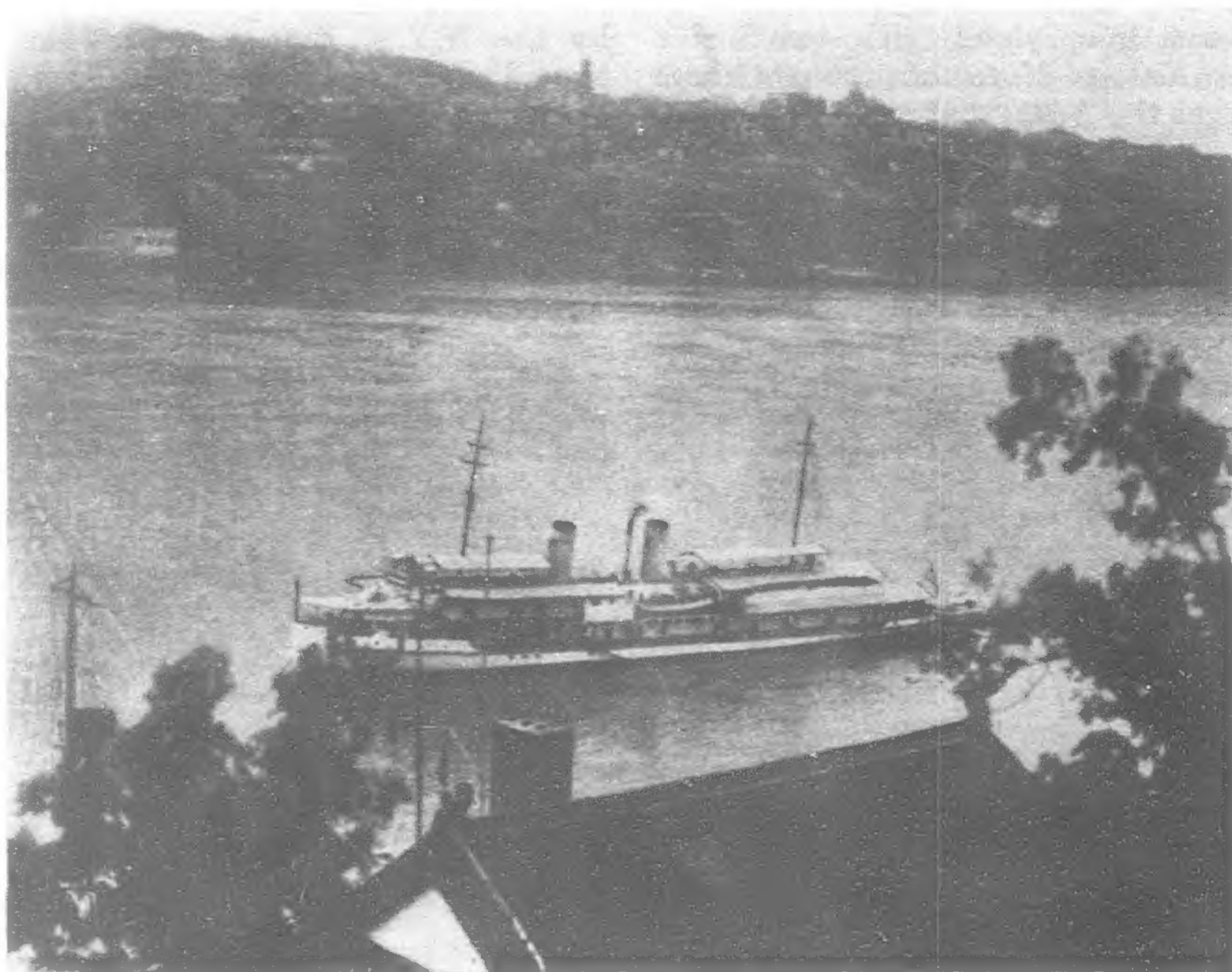
In ordinary times Chungking is not qualified for its present status. A Chinese city has to have a population of 1,000,000 before it can become a special municipality coming directly under the Executive Yuan. Before the bombings, Chungking had only half a million. To-day it has even less, about 380,000, as a result of the thinning-out process enforced after repeated bombings.

For the current year, Chungking's budget will reach \$3,300,000.

Its distribution is as follows: 32.8 per cent for public safety, 25.60 per cent for reconstruction or public works, 11 per cent for social, cultural and educational enterprises, and 31.32 per cent for financial administration and public health grants to various hospitals in the city. Next year, more money will be earmarked for education purposes.

The city government of Chungking, as it is constituted at present, comprises a secretariat, and five bureaux, namely, social affairs, police, finance, public works and public health. No increase in rates and no new taxes are two guiding principles of the present administration. It proposes to get the necessary amount through reorganizing the existing taxes.

Mayor Ho Kuo-kuang, since his recent appointment as Secretary-General of the Szechuen Provincial Government, has to spend most of his time in Chengtu. Acting for him in Chungking during his absence is Mr. Chaucer H. Wu, Secretary-General of the city government, who has been for many years the Special Commissioner for Foreign Affairs in Szechuen and Sikang provinces.



The American gunboat, the U.S.S. "Oahu" in the Yangtze at Chungking showing the city in the background

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Yunnan Telephone Service

By the summer of 1940, half of Yunnan province will be connected by an inter-regional telephone system. Service in the other half of the province, comprising mostly thinly-populated and little developed regions in the south-east, south-west and north-west, will be inaugurated within two years, says a Chinese report.

In addition to funds allocated by the Ministry of Communications to develop radio and telephonic service between the province and the outside world. Governor Lung Yun has recently appropriated \$100,000 from the provincial treasury to speed up the construction of telephone lines and equipment in Yunnan. The province is divided into seven telephone districts, four of which have been instructed to be ready for service next summer while survey work on the other three is under way.

Meanwhile, Kunming is fast improving its telephone service. The first instalment of 2,000 automatic phones has been delivered from abroad and the business section of the city is expected to have improved service by the end of this year. The training of operators is conducted under expert direction.

"Nitta Maru" Sailing on Maiden Voyage

Japan's Most Powerful Liner First Completed of Three Great Luxury Ships for the N.Y.K.

By W. HARVEY CLARKE, Jr.

As the latest accession to the Nippon Yusen Kaisha fleet of 162 vessels aggregating 1,060,000 gross tons, the 16,500 ton *Nitta Maru* is now scheduled to sail on her maiden voyage from Yokohama to California about the middle of April this year, and to return to Japan the following month. Her keel was laid early in May, 1938, at the Nagasaki Shipyards and Engine Works of the Mitsubishi Heavy Industries, Limited, and after almost a year and ten months under construction at the end of February, the luxury liner was turned over to the steamship company a completed job.

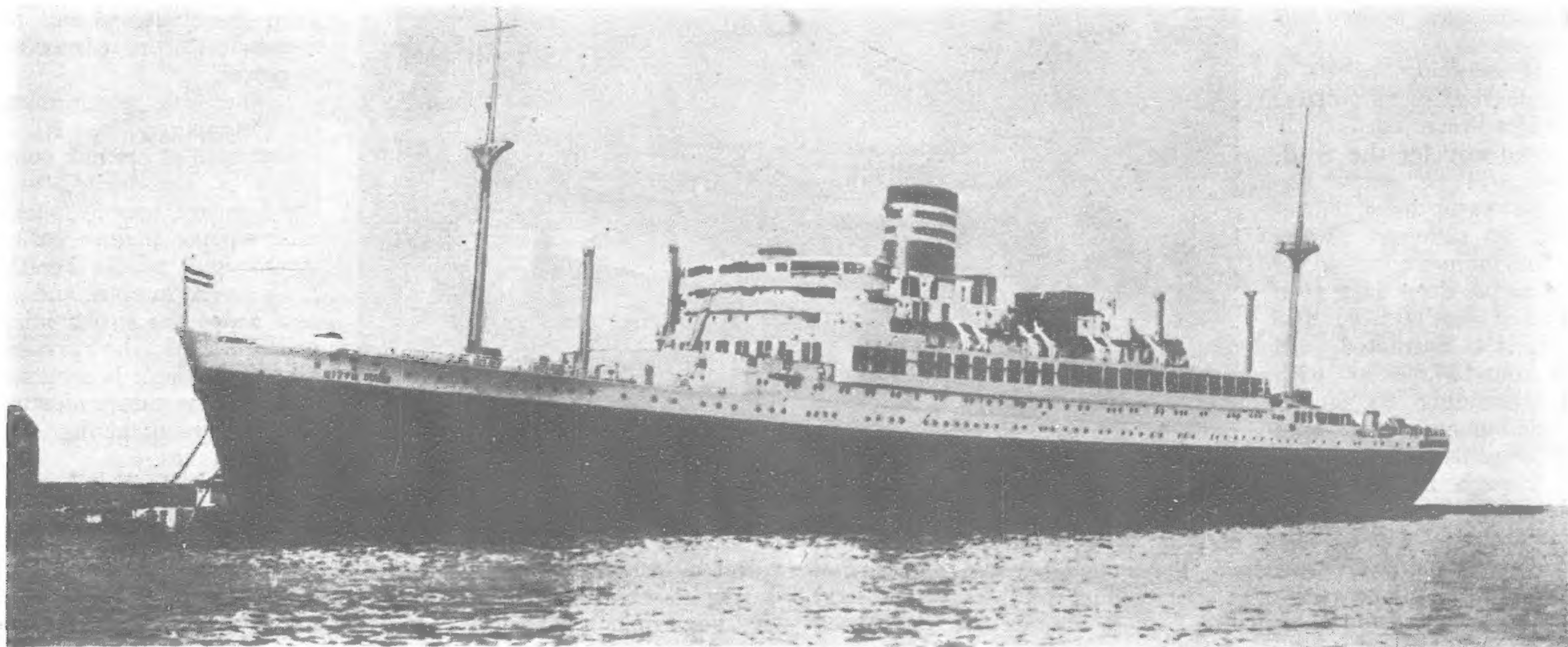
Instead of use in trans-Pacific service, originally she was intended for N.Y.K.'s European line, along with two sister ships, the *Yawata Maru* and the *Kasuga Maru*, both super liners calling for the same specifications as the *Nitta*, that are now nearing completion.

Rated the most powerful steamship of the Japanese mercantile marine, the *Nitta Maru* is equipped with two sets of turbines capable of delivering 28,359 horse-power. In her official tests off the coast of Nagasaki on February 15, she broke every record for ocean-

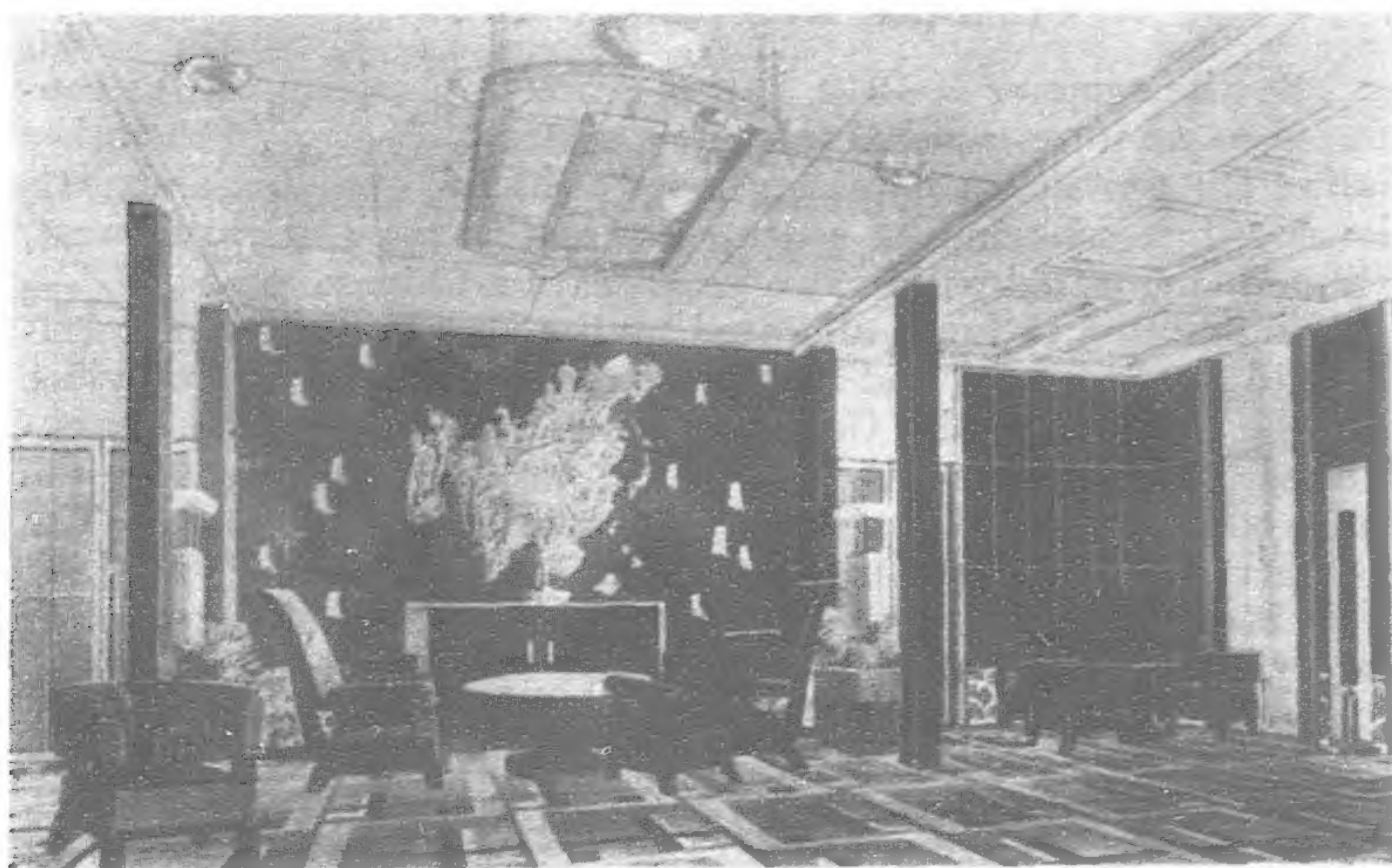
going passenger vessels of Japanese make, and as her designers expected, registered a top speed of 22.474 knots an hour, against a contract speed of 22 knots.

A unique feature in shipbuilding is evidenced in the fact that all public rooms as well as the first class staterooms in the *Nitta Maru* are air conditioned, with desired temperatures variable according to the seasons. Besides this departure from conventional steamship construction, all staterooms throughout the vessel are sound-proofed. Culinary equipment for cooking and the preparing of food is entirely electrified.

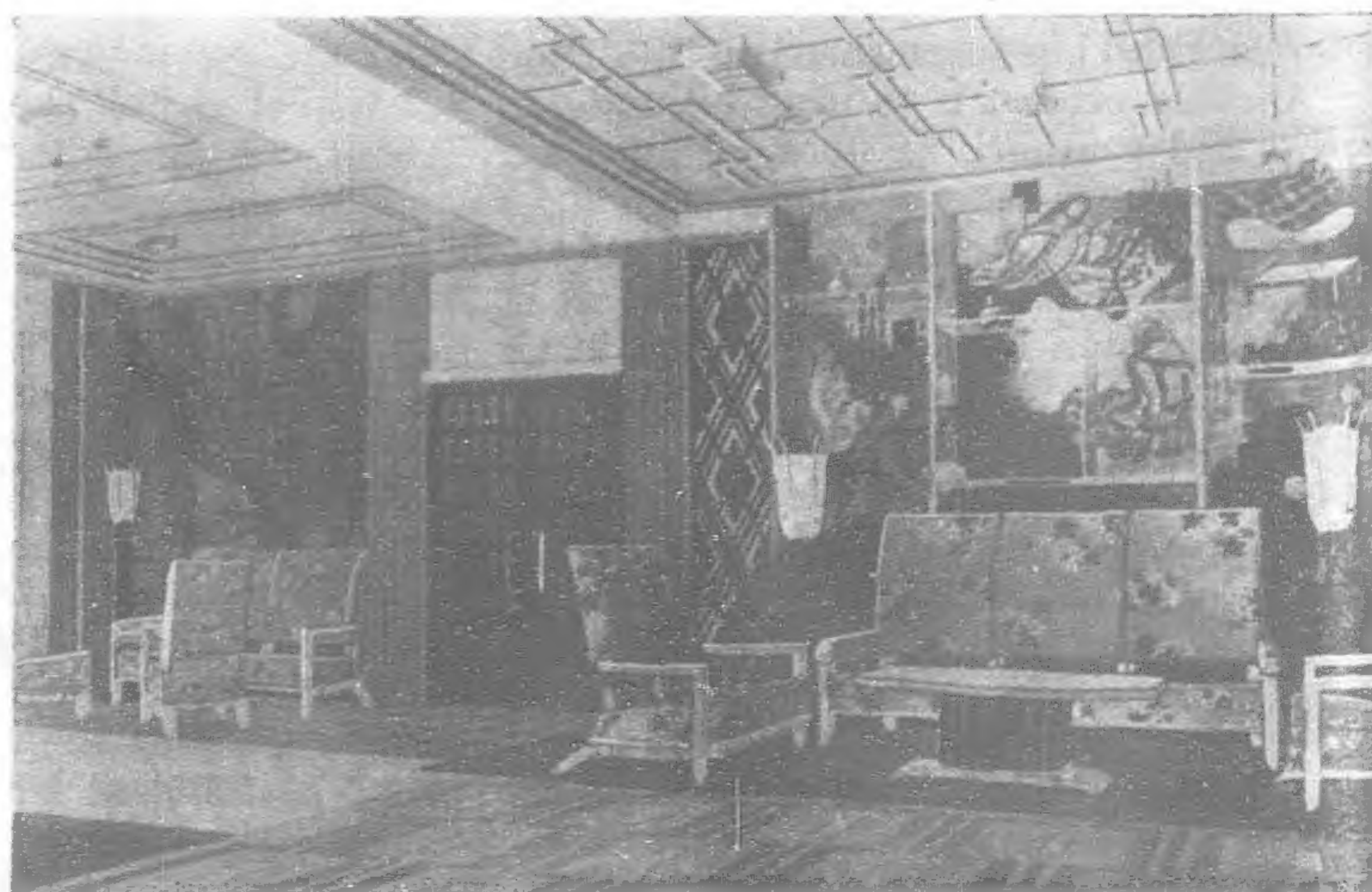
An enthusiasm in building these three luxury ships was shown by the N.Y.K. management when life-size models of the first, second and third class cabins were constructed at the Nagasaki Dockyards. These replicas are fitted out completely with plumbing fixtures, beds, bedding, clothes cabinets, chairs, electric lamps, curtains and furnished with other decorative as well as practical features, so as to afford opportunity for making improvements before final installations are carried out on shipboard.



The steamer "Nitta Maru" as seen when moored in fitting-out basin. This 16,500-ton luxury liner has a speed of more than 22 knots. All first class staterooms and many public rooms are air-conditioned



First class smoking room of the "Yawata Maru"



First class lounge of the "Nitta Maru"

From stem to stern the *Nitta Maru* is constructed of material manufactured in Japan. She represents one of twenty-five new ships totalling 250,000 tons gross that are being planned by the N.Y.K. organization.

The schedule of construction and particulars concerning the *Nitta Maru*, the *Yawata Maru* and the *Kasuga Maru* follow below :

Keel Laying :

<i>Nitta Maru</i>	..	May 9, 1938
<i>Yawata Maru</i>	..	Dec. 14, 1938
<i>Kasuga Maru</i>	..	Jan. 6, 1940

Date of Launching :

<i>Nitta Maru</i>	..	May 20, 1939
<i>Yawata Maru</i>	..	Oct. 31, 1939
<i>Kasuga Maru</i>	..	Aug. 20, 1940

Completion :

<i>Nitta Maru</i>	..	..	Feb. 29, 1940
<i>Yawata Maru</i>	..	..	July 31, 1940
<i>Kasuga Maru</i>	..	..	Apr. 20, 1941

Builders :

Mitsubishi Heavy Industries, Limited, at their Nagasaki Shipyards and Engine Works.

General Dimensions :

Gross weight	..	..	16,500 tons
Length	..	..	180 meters
Beam	..	..	22.5 meters
Depth	..	..	12.4 meters



The steamer "Yawata Maru," second of three new 16,500-ton luxury liners of the Nippon Yusen Kaisha in fitting-out basin. The vessel will be ready for service in mid-summer

Main Engine :

Two sets of Mitsubishi-Zoelly all impulse, high pressure turbines installed with double reduction gear equipment.

Normal Shaft Horse-power : .. 21,000 h.p.

Contract Speed : .. 22 knots per hour

Main Boilers :

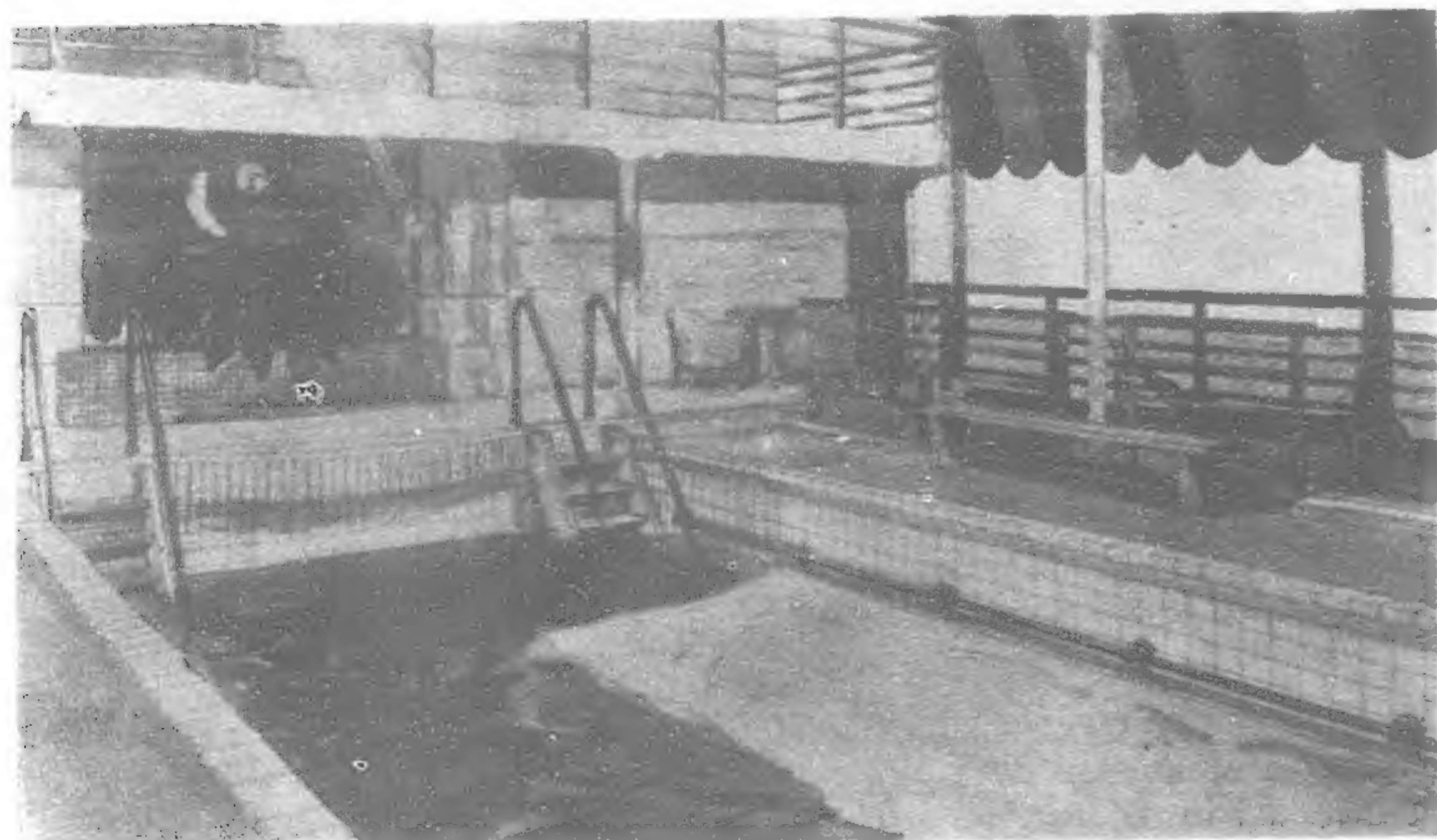
Four sets of oil burning Mitsubishi 3-drum, marine water tube, high pressure boilers. Directional Unit : Type 14 gyro-compass.

Passenger Accommodation :

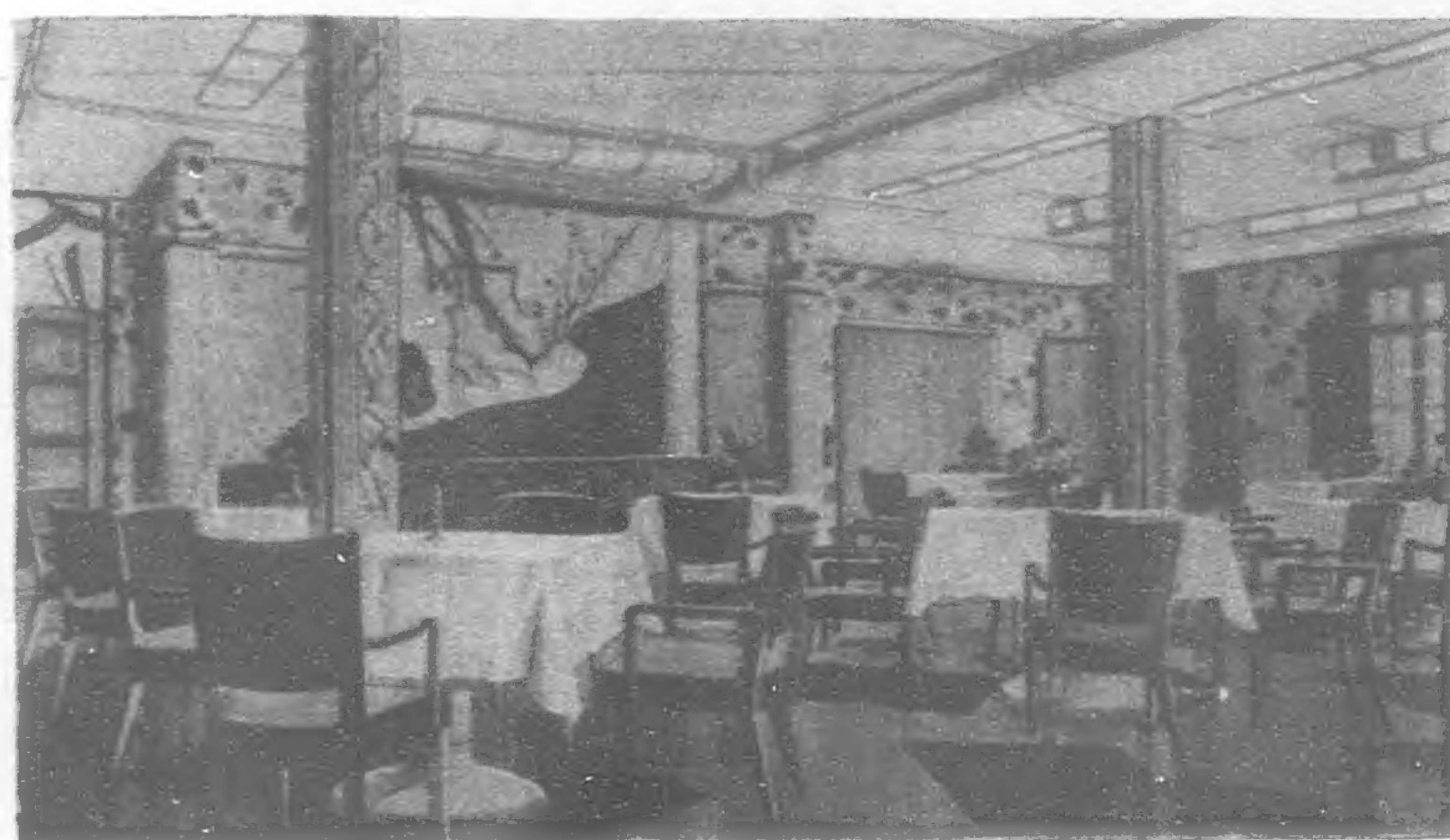
First class	..	..	..	127
Second class	..	..	..	88
Third class	..	..	..	70

Total .. 285

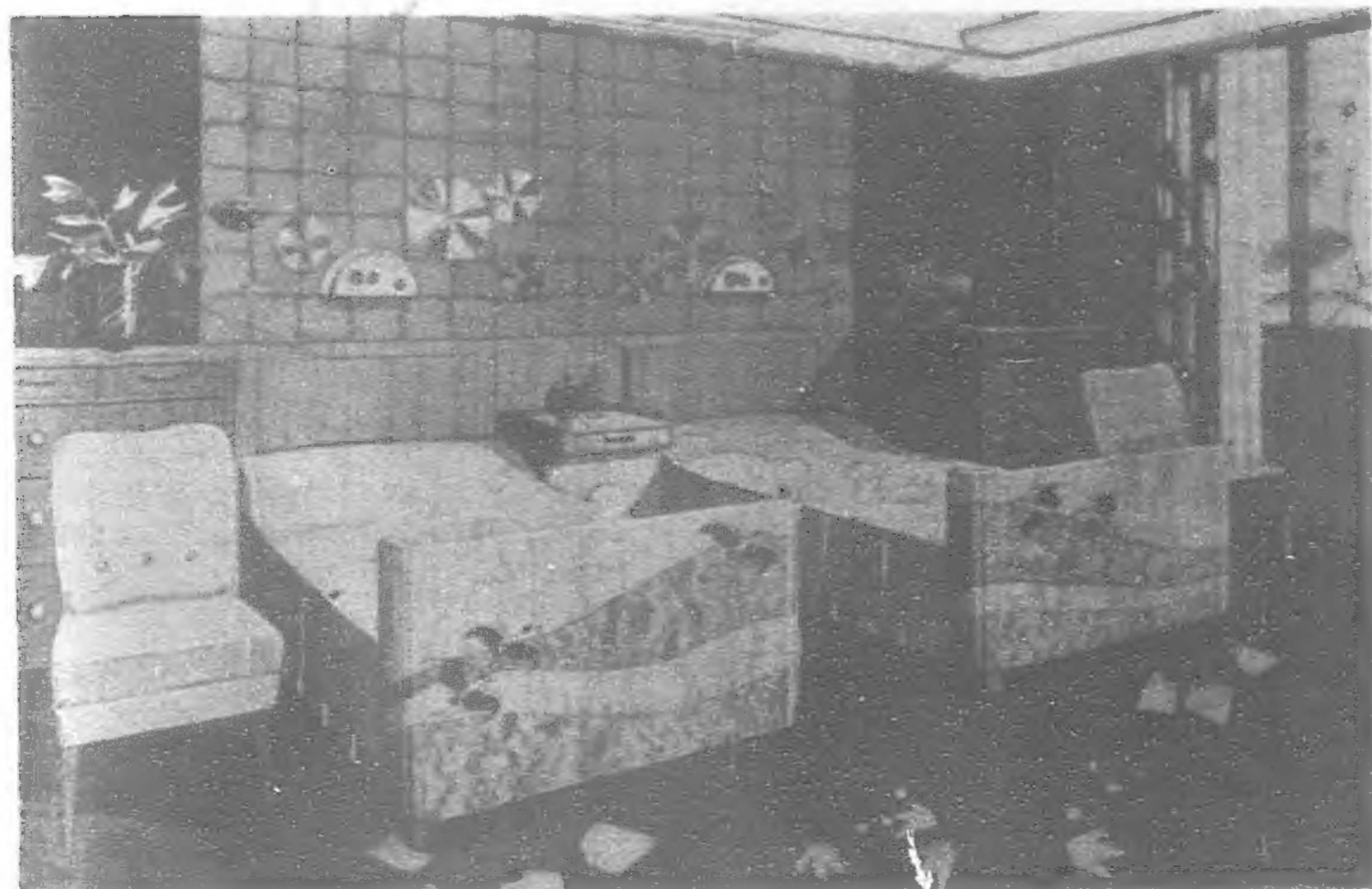
Cargo Capacity : .. 11,800 tons.



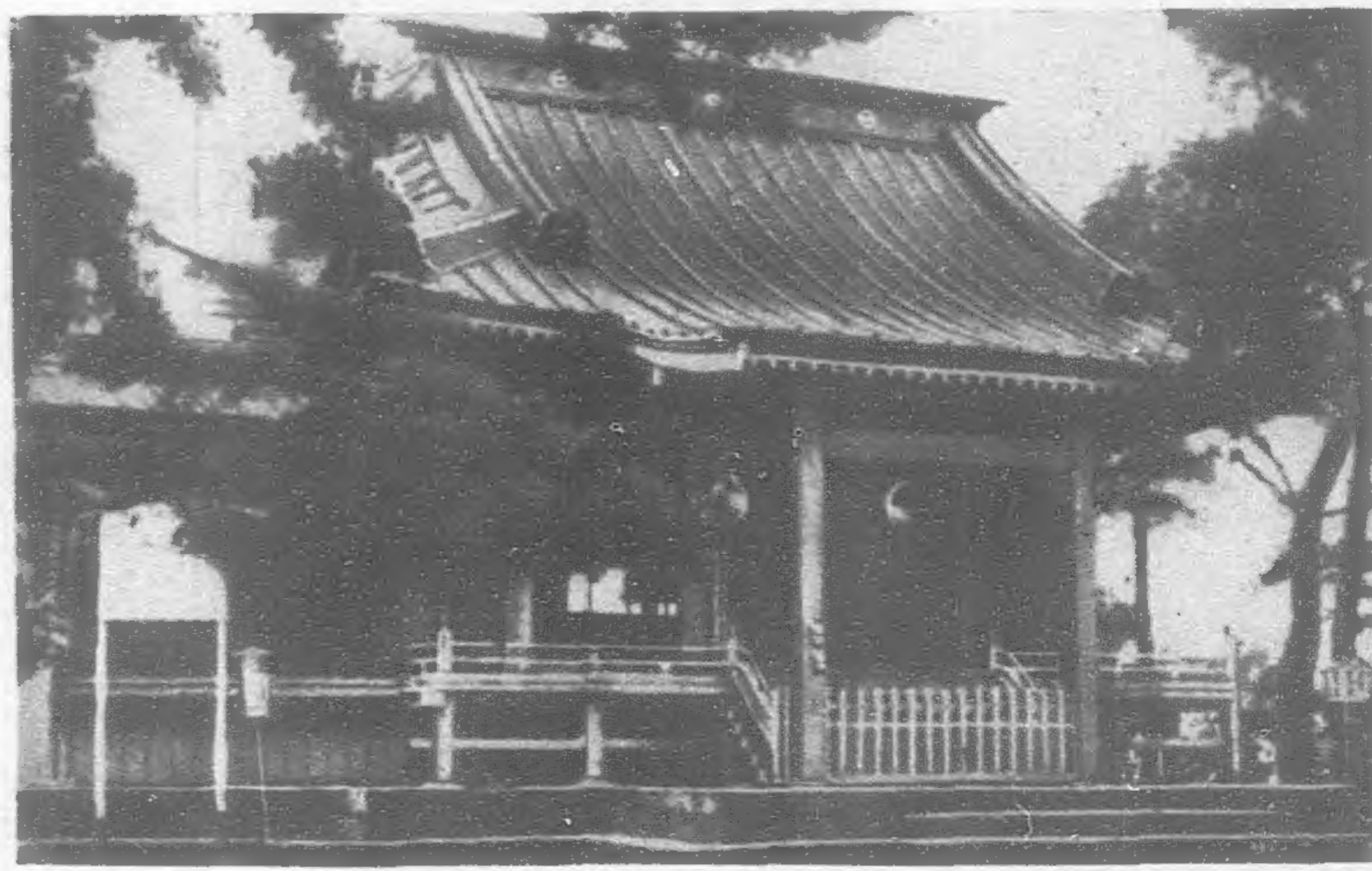
Swimming pool on the "Nitta Maru"



First class dining-room on the "Nitta Maru"



Suite de luxe on the "Nitta Maru"



Nitta Zinsya, the Shrine in Gumma prefecture after which the "Nitta Maru" was named

Engineering Notes

AVIATION

CHUNGKING-MOSCOW LINE.—The direct Chungking-Moscow air mail and passenger service which was recently inaugurated but later suspended, has now once again been resumed, states a telegram from Moscow.

The report continues that Soviet aeroplanes will be leaving for Chungking on the 6th, 13th, 20th and 28th day of the month, whilst Chinese machines are expected to depart for Russia on the 7th, 14th, 21st and 29th day of each month. The message adds that the Soviets will presently be operating 30,000 kilometers of air lines.

AIR LINE TO SIAM.—An agreement for the inauguration of a regular air service between Japan and Thailand (Siam) was signed at Bangkok in December.

The agreement, he added, was signed by Mr. Kuramatsu Murai, the Japanese Minister, and Major-General Luang Pradist Manudharm, the Foreign Minister of Thailand.

It is understood that, in accordance with the agreement, a regular air service between Japan and Thailand will be started in February.

PLANES ORDERED.—A fleet of twin-motored aeroplanes, equipped with 850 horse-power engines, has been ordered by the Japan Airways Company, it was announced in January. The planes will be constructed by the Mitsubishi Heavy Industry Company and will be completed within two years.

Several of the planes will be used on the Japan-Thailand service which is expected to be established soon. The other planes will be used on routes between Japan, Manchoukuo and China.

The new planes will accommodate eleven passengers and a crew of four persons and will travel at a speed of 300 kilometers an hour.

When the planes are completed the Peiping-Tokyo run will be made in eight hours. The trip now takes eleven hours. The planes will also be able to negotiate the Japan-Manchoukuo-China run without refuelling.

HANKOW AIR LINE.—Adding new facilities for travel in Central China, a daily round-trip air service has begun between Shanghai and Hankow.

Leaving Shanghai at 2 o'clock in the morning, the airliner arrives at Hankow at 11.55 o'clock, stopping only at Nanking on the way. The return flight begins at 12.20 o'clock, ending in Shanghai at 4.10 o'clock.

Twenty-seater Douglas DC-3 airliners are used on this line.

NEW AVIATION FIRMS.—China, Manchoukuo and Formosa will gradually be linked together by aviation, according to the *Sin Shun Pao*, which states that co-operation between China, Japan and Manchoukuo will be closer than before when two aviation companies, operating air services, are established on April 1 and June 1.

A Japanese aviation company is to be established on the former date to operate services between northern Formosa, Amoy and Shanghai. The Central China Aviation Company will be responsible for linking Dairen, Tsingtao and Shanghai.

This aviation enterprise was organized by business interests in Manchoukuo. Hope was expressed that Changchun, Dairen, Tsingtao, Nanking, Shanghai and Formosa would be linked by air.

CHINA AIRWAYS.—The charter for the China Airways Company, a semi-official firm which will monopolize the aviation business in Japanese-occupied areas in China, approved by the Peiping "Provisional Government," the new Nanking Government and the Federated Autonomy Government of Mongolia.

A capital of Y.50,000,000 was listed by the company of this amount Y.12,500,000 is cash. The company was granted the right to issue debentures amounting to Y.25,000,000. Redemption of the bonds was guaranteed by the governments concerned.

Air service between Shanghai and Canton, Dairen and Shanghai, Peiping and Hankow, and Canton, Tsingtao and Taiyuan, Tsingtao and Kaifeng and Shanghai, Hangchow and Nanking will be started by the company.

Air service between these cities will be started in addition to the operations of existing lines between Peiping and Dairen, Peiping and Paotow, Peiping and Shanghai and Shanghai and Hankow.

INDUSTRIAL

NEW PAPER MILLS.—The Tien Foong Paper Mill in Kunming, capital of Yunnan Province, start operations in January next, according to a report in the *Sin Wan Pao*.

The mill is equipped with German machinery and calculates to produce some five tons of newsprint daily. The enterprise is capitalized at \$1,400,000.

The Hua Hsing Paper Mill, the only paper plant in Shantung, is to be reopened next month under Japanese management, according to the Nippon paper *Tairiku Shimpō*.

COAL LIQUEFACTION.—The articles of association, personnel and allotment of shares were decided upon at the inaugural general meeting of the Kirin Synthetic Oil Manufacturing Company held at Hsinking recently.

The company uses the direct coal liquefaction method, using the brown coal being produced at Shulan, in Kirin Province.

Out of the Y.100,000,000 capital, Y.50,000,000 has been subscribed by the Manchoukuo Government, Y.20,000,000 by Teikoku Nenryo (Japan Fuel) and Y.30,000,000 by Nihon Chisso (Japan Nitrogen).

RUBBER RECLAMATION.—The first rubber reproduction plant will be established at Hsinking, Manchoukuo, at a cost of 50,000 yuan in order to meet the present demand for rubber tires and tubes in the State Capital.

For some time past the bus and taxi services in the Capital had found the supply of these commodities insufficient owing to the import control from Japan Proper.

On completion the plant will be able to boast of the latest modelled roller and reproduction machine large enough to supply sufficient material for the manufacture of motor-car tires and tubes in the metropolis.

RAILWAYS

NANCHANG LINE OPEN.—Rail travel between Nanchang and Kiukiang which was suspended when Gen. Chang Kai-shek's army destroyed the railway line has been resumed. Ceremonies celebrating the reopening of the line were held at the Lohwa station, 20 km. north of Nanchang.

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